DISSERTATION

ON

"A STUDY TO ASSESS THE EFFECTIVENESS OF MUSIC THERAPY ON DEPRESSIVE SYMPTOMSAMONG ELDERLY PEOPLE IN SELECTED GERIATRIC HOME, AT CHENNAI".

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Certificate

This is to certify that this dissertation titled **"A study to assess the effectiveness of music therapy on depressive symptoms among elderly people in selected geriatric home, at Chennai"**is a bonafide work done by Ms. L.Thulasi,II year M.Sc (Nursing) student, College of nursing, Madras Medical College, Chennai- 03, submitted to the **Tamilnadu Dr.MGR Medical University**, Chennai, in partial fulfillment of the university rules and regulation towards the award of degree of master of science in nursing, branch-v ,mental health nursing, under our guidance and supervision during the academic period from 2014-2016.

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Abstract

Title

A study to assess the effectiveness of music therapy on depressive symptoms among elderly people in selected geriatric home, at Chennai.

Successful ageing is reflected in the ability of older people to adapt to physical, social and emotional losses and to achieve contentment, security and life satisfaction. Because changes in life patterns are inevitable over a life time, older people need resiliency and coping skills when confronting depressive symptoms and change.

Need for the study:

Failure to adaptations of the ageing which can leads to frustration, loneliness, bitterness, and insecurity which makes older people prone for later life depression. The demand for curing depression is on the rise globally. Music therapy helps to relax and get healed up from depressive symptoms especially for elderly people.

Objectives:

1. To identify the socio demographic variables of the elderly people in selected geriatric home at Chennai.
2. To assess the depressive level before music therapy among elderly people in selected geriatric home at Chennai.
3. To evaluate the depressive level after music therapy among elderly people in selected geriatric home at Chennai.
4. To determine the effectiveness of the music therapy intervention.
5. To find the association of post test score with selected demographic variables.

Methodology:

Research approach: Quantitative approach

***Research design*:** One group pretest and posttest Pre-experimental design.

***Sampling technique*:** Convenient sampling technique.

Study population: Elderly people residing in geriatric home.

Sample size: A Sample of 60 elderly people is selected for this study.

Tool: Geriatric Depression Scale.

Study setting: kalaiselvi karunalaya old age home at west mogapair.

Data collection procedure: Old melodies songs were played through compact disc attached with speakers twice a day for four weeks.

Data analysis: Demographic variables and clinical variables were analysed with descriptive statistics (percentage, mean, standard deviation) and correlated the levels of depressive scores with demographic variables by inferential statistics (paired‘t’ test and chi square)

Study Results: The study shows the pretest score were 16.72 with standard deviation of ± 3.88. The posttests score were8.30 with standard deviation of ±2.16. This study revealed that music therapy as effective and healed the depressive symptoms among the elderly people. So the differences are large and it showed statistically significant difference ($P \leq 0.001$) in paired test.

Discussion: Depression being one of the causes of a variety of diseases and disorders in the world today, especially in elderly population, through this study it was proven that music therapy reduces the level of Depressive symptoms among elderly suffering from Depression. Therefore it is suggested that Music therapy can be done in all types of groups in long term basis as well for reducing depression. Hence the objectives have been achieved and hypothesis is proved.

Conclusion: There is effectiveness in music therapy on depressive symptoms among elderly people. Since it is cost effective it can be practiced in home settings. So the investigator conducted a study to assess the effectiveness of music therapy on depressive symptoms among elderly people in selected geriatric home at Chennai.

Key words: Elderly people, Music therapy, Depressive symptoms

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LIST OF ABBREVIATIONS

S. No	Abbreviation	Expansion
1.	GDS	Geriatric Depression Scale
2.	OAP	Old Age Pension
3.	X^2	Chi Square Test
4.	CI	Confidence Interval
5.	SD	Standard Deviation

CHAPTER I

INTRODUCTION

" Youth is like a fresh flower in May
Age is like a rainbow that follows the storms of life
Each has its own beauty."

- David Polis

Old age is not a disease. Ageing, which is an inescapable reality of the human existence on the planet earth, plays a crucial role in the global demographic transition.

Old age is a phase of life cycle characterized by its own developmental issues, many of which are concerned with loss of physical ability and mental acuity, friends and loved ones and status and power.

Successful ageing is reflected in the ability of older people to adapt to physical, social and emotional losses and to achieve contentment, security and life satisfaction. Because changes in life patterns are inevitable over a life time, older people need resiliency and coping skills when confronting depressive and change.

Failure to adaptations of the ageing which can lead to frustration, loneliness, bitterness, hopelessness, helplessness and insecurity makes older people are prone to get depression in later life.

WHO (2012) nearly 8% of persons aged ≥12 years (6% of males and 10% of females) report current depression. Females have higher rates of depression than males in every age group. Males aged 40–59 years have higher rates of depression (7%) than males aged ≥60 years (5%). Females aged 40–59 years have higher rates of depression (12%) than females aged 12–17 years (8%) and females aged ≥60 years (7%).

"Music energizes mood,"

"Music is a great stress buster,"

Plato 2002, "Music is a moral law. It is an expression of soul and soul to the universe, wings to the mind, flight to the imagination, a charm to sadness to gaiety and life to everything". Listening to music provides

wonderful effect to alleviate depressive symptoms. Music is a significant mood changer. Music can lead as person to a state of harmony. Thus music has been frequently used as the therapeutic agent and Indian classical ragas are proved to be very effective from the ancient times.

Shakespeare 2003 ,' If the music be the food of love, play on'…..Hence, the music therapy makes a person especially elderly residing in old age homes and in community setting healthy, physically as well as mentally health.

Music therapy is an allied health profession and one of the expressive therapies, consisting of a process in which a music therapist uses music and all of its facets physical, emotional, mental, social, aesthetic, and spiritual to help clients improve their physical and mental health.

Music therapist nurse primarily help clients improve their health in several domains, such as cognitive functioning, motor skills, emotional development, social skills, and quality of life, by using music experiences such as free improvisation, singing, and listening to, discussing, and moving to music to achieve treatment goals.

It has a wide qualitative and quantitative research literature base and incorporatesclinical therapy, psychotherapy, bio-musicology, musical-acoustics, musictheory, psychoacoustics, embodied music cognition, aesthetics of music, sensory integration, and comparative musicology.

Music therapy comes in two different forms: active and receptive. In active therapy, the therapist and patient actively participate in creating music with instruments, their voice, or other objects. Receptive therapy takes place in a more relaxed setting where the therapist plays or makes music to the patient who is free to draw, listen or meditate.

Dr. Thaut, **2004** "The brain that engages in music is changed by engaging in music." NMT trains motor responses (i.e. tapping foot or fingers, head movement, etc.) to better help clients develop motor skills that help "entrain the timing of muscle activation patterns".

1.1 Need for the Study

Global level: **Wimo, Ribeiro, Ferri, 2013**It was estimated that 35.6 million people lived with depressive symptoms worldwide in 2010, with numbers expected to almost double every 20 years, to 65.7 million in 2030 and 115.4 million in 2050.

World Federation for Mental Health; 2012 Depression can cause great suffering and leads to impaired functioning in daily life. Unipolar depression occurs in 7% of the general elderly population.

The World Health Organization (WHO) 2005, In measuring the level of depressive symptoms, subjective self-reporting tools such as the Geriatric Depression Scale. Music can change the emotional state of the listener, which may have a beneficial effect on the symptoms of depression. Music listening without a therapist can be easily initiated by any healthcare professional, or even the patient, to create a healing environment. Unlike pharmacotherapy, there is no documented adverse effects from music listening.

WHO Global Burden of Disease report 2004, depression is the leading cause of burden of disease during 2000-2002, ranked as third worldwide. It is projected to reach second place ranking worldwide by the year 2020 and first place by 2030.Depressive disorders leading to suicide are widely recognized.We got a permission to go for a visit to old age home as a requirement of Msc (N)I year. There the elderly people were found to have depressive symptoms. This situation made me to choose this topic for the study.

International level: **Luppa et al., 2010** A German population-based studies reported a prevalence of depressive symptoms of 14.3%, diagnosed with the Center for Epidemiologic Studies Depression Scale (German cut-off of 23)

Kristen. L. Mark. 2006 The chances of developing a depressive illness are estimated to be 1 in 5 for women and 1 in 10 for men. People 65+ represented 12.4% of the population in the year 2000 but are expected to grow to be 19% of the population by 2030.

American Psychiatric Association *Diagnostic and Statistical Manual for Mental Disorders,* 2000 Nearly twice as many women 12.4 million (12.0 percent) as men 6.4 million (6.6 percent) in U.S are affected by a depressive disorder each year.

Indian level: **Population Ageing and Health in India (2003)** In India the size of the elderly population, i.e. persons above the age of 60 years is fast growing although it constituted only 7.4% of total population at the turn of the new millennium.

Community level: **Clin diagn J et al., (2013) Chitoor** Ten percent of the people who are older than 65 years have depressive symptoms and one percent have major depressive disorders. Increase in 69% in number of old age homes in four years.

Pallavi M et al., (2012) Thirchy Old age homes facilities for organizations working for the welfare of the aged and effective implementation of old age pension, are some of the measures that need to be taken.

Ego Integrity Theory 2015 Integrity vs Despair is a crucial stage for later life.

Continuity theory 2015 Disengagement and ego-integrity may offer tools helping the elderly.

1.2. Statement of the Problem:

"A study to assess the effectiveness of music therapy on depressive symptoms among elderly people in selected geriatric home, at Chennai".

1.3. Objectives:

1. To identify the socio demographic variables of the elderly people in selected geriatric home at Chennai.
2. To assess the depressive level before music therapy among elderly people in selected geriatric home at Chennai.
3. To evaluate the depressive level after music therapy among elderly people in selected geriatric home at Chennai.
4. To determine the effectiveness of music therapy intervention.

5. To find the association of post test score with selected demographic variables.

1.4. Operational definitions:

- **Assess:** Assess refers to the process of documents the music therapy in heals up of depressive features like frustration, bitterness, loneliness and insecurity among the elderly people.
- **Effectiveness:** Effectiveness refers to the extent to which music therapy has achieved the desired effect in terms of heals up of depressive features like frustration, bitterness, loneliness and insecurity of the subjects studied.
- **Depressive symptoms:** Depressive symptoms denote the state that causes physical, psychological and psychosocial disturbances and its levels can be detected using geriatric depression scale.
- **Music therapy**: Music denotes to the listening music to individual and group in a regular basis for a fixed time and period by using ragas and thalas or some karnatics or old melodies where its effects (heals up of depressive symptoms) can be seen in post test scores after completion.
- **Elderly people**: Elderly people are those who come under the age group of 60-80 years of age with depressive symptoms.

1.5. Assumptions:

- Geriatric will have depressive symptoms.
- Geriatric with depressive symptoms will be healed up by music therapy.
- Music therapy has influence in reducing the level of depressive symptoms among elderly people.

1.6. Hypotheses:

- **H_1:** Music therapy is effective in reducing depressive symptoms among elderly people.
- **H_2:** There is association between the selected demographic variables and level of depressive scores among elderly people.

1.7. Delimitation:

- The study is limited to elderly people who are residing in old age home.
- Elderly people who can understand Tamil or English and respond verbally.
- The study is limited to data collection period of four weeks.

CHAPTER II

REVIEW OF LITERATURE

The literature reviewed under the following headings.

Section-A: Literature related to incidence and prevalence of depressive symptoms among elderly.

Section-B: Literature related to effectiveness of music therapy.

Section-C: Literature related to effectiveness of music therapy on depressive symptoms.

Section-A:

2.1. Literature related to incidence and prevalence of depressive symptoms among elderly.

Barcelo Ferreira R. et al., (2010) has done a systematic review and meta-analysis on Depressive morbidity and gender in community dwelling Brazilian elderly among elderly average age participants varied between 66.5 and 84.0 years by selected and extracted the articles from Medline, LILACS and SCIELO data bases. A total of 17 studies were found. The review indicates that the odds ratio for major depression and clinically significant depressive symptoms (CSDS) were greater among women.

Barea A et al., (2010) conducted a meta-analysis on prevalence of depressive disorders in elderly, in Asia, Europe, Australia and America. Total elderly individual of 48775 in the age group of 65 years and above residing in various parts of the world. The median prevalence rate of depressive disorders in the world of elderly population 10.3%. The median prevalence rate of depression among elderly among Indian population as 1.9%. The risk factors for depression in elderly were identified as older age group, female, low socioeconomic, loss of spouse, living alone, restricted ADL.

Chong YM et al.,(2010) conducted a community study on depression of old age in Taiwan to study the prevalence of depressive disorders among community dwelling elderly and to assess the socio demographic correlates life events. In relation to depression by automated geriatric examination scale. Results showed that psychiatric disorders as 37.7%, with 15.3% depressive neurosis and 5.9% major depression. A high risk of depression is found among income status and widowed in the urban community, and who had physical illness and were depending on others for ADL.

Covinsky K E et al., chorea**(2010)** conducted a prospective cohort study on Depressive symptoms in middle age and the development of later life functional limitations. The long term effect of depressive symptoms among a sample of people aged 50 to 61 by using 11 item centers for Epidemiologic studies depression scale (CES-D 11). The results depicts that depressive symptoms independently predict the development of persistent limitations in ADLs and mobility as middle aged persons advance into later life.

Tor Atle Rosness et al., (2010) investigated a study published in International Journal of Geriatric Psychiatry on Occurrence of depression and its correlates in early onset dementia patients (EOD) and which characteristics were associated with depressive symptoms among 221 patients under the age of 65 by using Montgomery Asberg Depression Scale (MADRS). It was found that high occurrence of depressive symptoms in EOD patients and a history of depression was most important correlate of depression in these patients.

Vishal J et al.,(2010) conducted a study to assess the depression among aged, in Surat city. A total of 105 elderly people were interviewed comprising of 35 each from old age home. The results were recorded as

mean+_ SD and p values, severely depressed are more in old age home5.7%, the prevalence of marital as found to be significantly higher in elderly single (74.5%),widowed (18.0%), the study concluded that there as urgent need to improve the geriatric health services in the country.

Rajkumar AP et al., (2009) conducted a study to assess the nature and prevalence factors associated with depression among the elderly in a rural south Indian community. 1000 participants aged over 65 Years from Kaniyambadi Block, Vellore India. Prevalence of geriatric depression within 1 month is 1.7 %, 95CI=10.64-14.67%. Low income 1.78, 95CI=1.08-.91%, increased risk for geriatric depression after adjusting for other determinants conditional logistic regression, having more confidents 1.13.95%CI=0.6-0.6.

Mendes Chiloff C et al., (2008) evaluated the prevalence of depressive symptoms associated factors among elderly hospital inpatients in Brazil. A cross sectional studies evaluated 189 participants using geriatric depression scale to assist a dependents regarding ADL. In this study regarding most of the participants were aged between 60-95 years with low levels of educational attainment and non-qualified occupation. The prevalence of depressive symptoms as 56%. But only 3% had psychiatric medical records.

Kaneko Y et al., (2007) assessed the prevalence of depression in rural community in Japan. A cross sectional study design as used and a questionnaires' survey as a total of 763 elderly persons. The prevalence of depressive symptoms assessed by Zungs Self-Rated Depression Rated Scale of 50 points or more. The highest ratio of 6.01 $p<0.01$, 95% CI=.86-1.59. The other significance variables are age-80 years, p=0.01. 95% CI= 1.30-5.97, family p=0.0, 95% CI=1.19-6.49, poor mental

health p=0.01, CI 95%= 1.31-5.93. a strongest association with depressive symptom as found for poor subjective physical health.

Plassman ***et al.,(***2007**)** Indonesia. The ADAMS sample began with a stratified random subsample of 1770 individuals aged 70 years or older from five cognitive strata based on participants' scores on a self-reported or proxy-reported cognitive measure from the most recent HRS interview (either 2000 or 2002The three highest cognitive strata were further stratified by age (70–79 years vs. ≥80 years) and sex to ensure adequate numbers in each subgroup.

Quine and Morrell et al.,(2006)found that 34.4% of older women reporting problems with oral health or dentures had felt depressed in the previous four weeks. The 74 included studies involved 487 275 elderly individuals from all parts of the world at baseline. Among these, six studies from India involved only 2499 (0.5%) elderly individuals at baseline, for assessment of presence of depression. The mean ages of the study population were reported in 68 (85.1%) articles with the mean ranging from 62 to 71 years. Sixty-eight (91.9%) articles included gender distribution and 36% to 64% of the participants were men (median=46%). The length of the reported study period ranged from 3 to 84 months (median=9). Only 52 (70.3%) studies used some of modern rating scales for diagnosis of depression in the elderly.

Chi I et al., (2005) conducted a study to assess the prevalence of depression and its score relates hon Kong Chinese older adults. The investigator interviewed random representative sample of 917 community dwelling Chinese adults of age 60 and over. The 15 items Chinese version of geriatric depression scale with the cutoff of more than 8 used to identify the clinically depression in the older adults. The investigator found that 11.0 % and 14.5% of older Chinese men and

women respectively scored above the cut off and the prevalence rate as similar to those found in other countries.

Harris T et al., (2005) assessed the onset and prevalence of depressive symptoms in London. A prospective cohort study with index assessment and patience initially aged more than 65 years were registered. N=1164. Depression as found by a score more than 5 out of 15, on the 15 item geriatric depression scale. The incident of depression scale as 8.4 %, while depression persisted among 61.5 % of those depressed at baseline.

Langa ***et al.***, (2005**)** Full details of the ADAMS sample design and selection procedures are described elsewhere. The ADAMS initial assessments occurred between July 2001 and December 2003, on average 13.3 months (SD 6.9) after the HRS interview. Thus, participants were 71 years of age or older at the initial assessment. Depression data were available for 851 of the 856 (99.4%) of the ADAMS participants. shows depression prevalence based on the different depression measures, by demographic characteristics and cognitive status.

Martin G Cole et al., (2005) A Meta-Analysis By University of Liverpool found a 3.86% prevalence of depressed elderly in the people‘s republic of china, compared to 12% prevalence in western Europe. Prevalence rates also varied by age, with older women overall appearing at less risk of experiencing depression (1.9% in the 60–64 year age group compared to 6% of 20–24 year olds and 4.4% of 40–44 year old women respectively). Middle-age has been defined as being between 45 and 64 years of age [92]. In this age group, the prevalence of depression varied from 9.2% [58] to 24% [52], most probably attributable to variations in age groupings and other sample differences between studies. The average age of women included in this section was 70

years. Prevalence estimates of depression among older women in this review vary considerably due to differing sampling compositions, from as low as 1.77% to 34.7% of the representative samples.

M.Sherina, et al., (2005) conducted a study to assess the prevalence of geriatric depression among elderly in Selangor. 30 item geriatric depression scale questionnaire was used as main screening instrument. Out of 316 elderly samples 300 were interviewed giving the response rate of 94.9%. the results showed that 6.3% of the elderly respondents were found to have no depression. Gender p=0.015, ethnicity p=0.08, chronic illness p=0.028 and cognitive impairment p=0.000 were found to be significantly associated with depression among elderly respondents. The prevalence of depression the elderly respondents in this study as 6.3%.

Patel.V et al., (2001) conducted a study on ageing and mental health in developing countries in Goa, India. A vignette of elderly people with depressive symptoms is recognized. The primary health physician rarely saw this condition in their clinical Work, but community health workers frequently recognized individuals with depression. Depression was the common in primary health care, but infrequently diagnosed. The study concluded that there was need to raise awareness about mental disorders of late life in the community and among health professionals to improve access to appropriate health care in the community.

Prasanth.T et al., (2000) conducted a study to explore socio demographic profile and clinical characteristics of patients aged 60 years and above in Varanasi. Depressive disorders were the most common disorders in psychiatry (43%) depressive were the most common psychiatric illness. People living in the old age home felt better than those who lived with children.

Section B:

2.2. Literature related to effectiveness of music therapy.

The Arts in Psychotherapy Volume 40, Issue 2**, April 2013,** Effects of music therapy on perception of stress, relaxation, mood, and side effects in patients on a solid organ transplant unit: A randomized effectiveness study.

Jp., (2010) Published in Healthy Fellow of Music therapy, a report from the Department of Psychology at the University of Sussex methodically elucidates how sounds can literally alter the makeup of the body and mind. According to this review the paper describes it as follows: "music engages sensory processes, attention, and memory - related processes, perception - action mediation, and multisensory integration, activity changes in core areas of emotional processing of musical syntax and musical meaning and social cognition".

Anny.J.madson et al.,(2009)conducted a randomized controlled experimental study to identify the effect of music therapy on quality of life for solid organ transplant recipients, donors and their care giver by using quality of life inventory method. The finding revealed that having high scores in quality of life in the experimental group.

Chen.sl,lin.HC et al.,(2009) conducted a randomly experimental study on perceptions of group music therapy among elderly nursing home residents in Taiwan among 17 wheel chair bounded elderly residents by using Focus group methodology to explore the perceptions of elderly participants about their experience of group music therapy. The findings of this study suggest that elderly positively viewed their experiences and healthcare providers should consider integrating group music therapy into their programme for elderly nursing home residents. It designs the therapy to add variety to their life and improve their cognitive function.

Chan et al., (2003)conducted the study to assess the effect of music on anxiety levels. The trial compared 112 women who listened to music during the procedure and 108 who did not. This single trial which was at low risk of bias found that listening to music during colposcopy examination was associated with a significant reduction in anxiety levels compared to not listening to music (MD= −4.80) (95% CI: −7.86 to −1.74). Participants (N = 38) were randomly assigned to experimental or wait-list control conditions in a pre–posttest single-session design. This study included 16 Cochrane reviews. Music therapy treatment improved the following: global and social functioning in schizophrenia and/or serious mental disorders, gait and related activities in Parkinson's disease, depressive symptoms, and sleep quality.

Dr. Arun S et al.,(2003) Music Therapy is a complimentary therapy that promotes the inbuilt natural healing process. Medicinal Indian vocal music therapy is a culmination of 10 years or research on the effect of Indian music based on a combination of multiple sciences. It is not only therapeutic for physical, mental and emotional disorders but it also elevates the participant to a new spiritual dimension effortless.

Bradt et al., (2003)

- Indicated that music interventions may have beneficial effects on anxiety, pain, mood, and quality of life (QoL) in people with cancer. Bradt and Dileo reported that there may be a benefit of Music therapy on QoL of people in end-of-life care.
- Indicated that listening to music may have a beneficial effect on heart rate, respiratory rate, and anxiety in mechanically ventilated patients.
- Reported that rhythmic auditory stimulation might be beneficial for gait improvement in people with stroke.

- Reported that listening to music may have a beneficial effect on blood pressure, heart rate, respiratory rate, anxiety, and pain in persons with coronary heart disease.

Cepeda et al., reported that listening to music reduces pain intensity levels and opioid requirements on patients with chronic, acute, neuropathic, and cancer pain or experimental pain, but the magnitude of these benefits is small and therefore its clinical importance unclear.

De Dreu et al., reported that music-based movement therapy appeared promising for the improvement of gait and gait-related activities in Parkinson's disease.

De niet et al., concluded that music-assisted relaxation could be without intensive investment in training and materials and is therefore cheap, easily available and can be used by nurses to promote music-assisted relaxation to improve sleep quality.

Drahota et al., reported that music may improve patient-reported outcomes in certain circumstances such as anxiety for hospital patients. Chan et al concluded that listening to music over a period of time helps to reduce depressive symptoms in the adult population.

Gold et al., indicated that Music therapy may help children with autistic spectrum disorder to improve their communicative skills. Reported that Music therapy is an effective treatment which helps people with psychotic and nonpsychotic severe mental disorders to improve global state, symptoms, and functioning.

Laopaiboon et al., indicated that music during planned cesarean section under regional anesthesia may improve pulse rate and birth satisfaction score.

Maratos et al.,identified that Music therapy is accepted by people with depression and is associated with improvements in mood, but the small number and low methodological quality of studies meant that it is not possible to be confident about its effectiveness.

Mossler et al., concluded that Music therapy as an addition to standard care helps people with schizophrenia to improve their global state, mental state (including negative symptoms), and social functioning if a sufficient number of MT sessions are provided by qualified music therapists.

Naylor et al., reported that there is limited qualitative evidence to support the effectiveness of music on health-related outcomes for children and adolescents with clinical diagnoses.

Dr. Frederick TIMS., (1999) reported in American music college music news "Music making makes the elderly healthier.... There were significant decreases in anxiety, depression, and loneliness following keyboard lessons. These are factors that are critical in coping with stress, stimulating the immune system, and in improved health. Results also show statistically significant increases in human growth hormones following the same group keyboard lessons. (Human growth hormone is implicated in aches and pains.)"

Marteau et al., 1996London the smallest trial of (n=15) in the treatment group versus n=13 in the control group) showed a significant reduction in the anxiety levels in women receiving specifically designed music therapy information leaflets (MD = −8.70, 95% CI: −14.61 to −2.79).Data were available from two trials assessing 373 participants who had been randomized to either information leaflets i.e., is music therapy prior to their colposcopic examination or to no information leaflets.

Section-C:

2.3. Literature related to effectiveness of music therapy on depressive symptoms.

Anju U et al., (2012) conducted a study to assess the effectiveness of music therapy on depressive symptoms among elderly in NIMHANS Bangalore. A total of 60 samples of elderly people were taken to the research. The results were concluded that p is <0.05, mean scores17.97< 3.47 in pre intervention to 14.17< 3.85 in post assessment to 1.03<3.50 in follow up assessment.

Erkkilä et *al. (2011) Kerala* lay down a clear marker for the value of music therapy as part of the range of interventions available for the treatment of people with depression. During the study period 123 people were screened, of whom 113 (92%) were eligible to participate in the study 31 eligible patients (27%) refused to take part in the study and 1 (1%) was considered unsuitable for music therapy following assessment by a music therapist. The remaining 81 (72% of eligible patients) were randomized 60 (74%) were men, and ages ranged from 18 to 64 years (mean 37). Of the 81 participants, 33 (41%) were randomized to music therapy and 48 (59%) to control treatment.

According To The World Health Organization (WHO)(2010) Two studies utilized the GDS-30 scale to measure depressive symptoms. In both studies, the GDS-30 scores were reduced from baseline at Week 4 in the music group. For the control group, both studies reported an increase in depression score from baseline at 4 weeks. There were two studies which utilized CES-D to quantify depressive symptoms. Both studies obtained a non-statistically significant reduction in CES-D score in the music group at the end of the studies. The CES-D score in the control group remained relatively stable. One study utilized the Yesavage Depression Scale to quantify depressive symptoms in elderly

patients undergoing gastrointestinal surgery. The participants in the music group actively played songs with a leading key lighting system, which guided the participants on the keys to press on the keyboard. The intervention was provided by either the surgeons or nurses. The intervention was conducted for ten minutes per session from pre-operation day to one to two days after surgery.

Christian Gold, Ph.D. et al.,(2010) "Our trial has shown that music therapy, when added to standard care including medication, psychotherapy and counseling, helps people to improve their levels of depression and anxiety. Music therapy has specific qualities that allow people to express themselves and interact in a non-verbal way even in situations when they cannot find the words to describe their inner experiences."

Jaakko erkkilä, Ph.D. et al.,(2010) "We found that people often expressed their inner pressure and feelings by drumming or with the tones produced with a mallet instrument. Some people described their playing experience as cathartic." Outside experts believe this study shows that music therapy is an effective adjunct to traditional therapy and improves outcomes.

Chan M.F.et.al.,(2009) California conducted a randomized controlled an experimental study on effectiveness of music on depression levels and physiological responses in older adults among 47 elderly people. It reveals that the listening of music can facilitate the non-verbal expression of emotion and allow people's inner feelings to be expressed without being threatened and in the music group; there were statistically significant decreases in depression scores, respiratory rate, heart rate and blood pressure. It suggests that nurses may utilize music as an effective nursing intervention for older adults with depressive symptoms.

John wiley et al.,(2009) The Cochrane Collaboration Published by Five studies met the inclusion criteria of the review. Marked variations in the interventions offered and the populations studied meant that meta-analysis was not appropriate. Four of the five studies individually reported greater reduction in symptoms of depression among those randomized to music therapy than to those in standard care conditions. The fifth study, in which music therapy was used as an active control treatment, reported no significant change in mental state for music therapy compared with standard care. Dropout rates from music therapy conditions appeared to be low in all studies.

The Cochrane Library. (2009) A therapist may be able to use music to help some patients fight depression and improve, restore and maintain their health, About 121 million people world-wide are believed to suffer from depression. This can be seen in disturbed appetite, sleep patterns and overall functioning as well as leading to low self-esteem and feelings of worthlessness and guilt. It can lead to suicide and is associated with 1 million deaths a year.

The Study Is Published in the British Journal of *Psychiatry*(2009) Researchers from the University of Jyvaskyla recruited 79 people between the ages of 18 and 50 years old who had been diagnosed with depression. Thirty-three of the participants were offered 20 music therapy sessions, in addition to their usual treatment for depression. The one-on-one music therapy sessions each lasted 60 minutes and took place twice a week. Trained music therapists helped each participant to improvise music using percussion instruments and drums.

Mike crawford, m.d.,et al.,(2008) the *British Journal of Psychiatry*, "This is a high-quality randomized trial of music therapy specifically for depression, and the results suggest that it can improve the mood and general functioning of people with depression.

A National Poll of Listeners to a Popular BBC Music Station (2004), the best way to ameliorate one's depressive symptoms musically is to listen to 'I Know It's over' by the Smiths. Alas, the widespread availability of down-hearted rock does not appear to have diminished the prevalence of depression. And although listening alone to music that is personally meaningful is what many people imagine music therapy to be, the reality as practiced in the UK and in many other parts of Europe is quite different.

Hsu.wc, lai hl et al.,(2004)China conducted a randomized controlled an experimental study on the pretest and posttest with a two group repeated measures design on Effectiveness of soft music of major depression in psychiatric inpatients. Subjects listened to their choice of music for two weeks and depression was measured by using Zung's Depression scale before the study and at two weekly posttests. It concludes that music resulted in significantly better depressive scores, as well as significantly better sub scores of depression compared with controls. The findings provide evidence for psychiatric nurses to use soft music as an empirically based intervention for depressed inpatients.

Shara Sand, Psy.D et al.,(2004) Clinical assistant professor of psychology at Yeshiva University in New York City, agreed with researchers' conclusion that meta-analysis was not possible in the review, but said that the evidence of music's influence on mood makes the research question interesting.

Dr. Shipra B et al.,(2003) anesthetic involved in health management, refers to the sample study conducted at Rural Medicare in Mehrauli music for relieving pain which showed that most of the patients, generally poor were relieved from pain and discomfort when subjected to music therapy.

Maratos G et al., (2003), head of profession for Arts Therapies at the Central and Northwest London NHS Foundation Trust, and colleagues looked for randomized controlled trials that compared music therapy with other, more traditional interventions for depression. They found a dearth of rigorous research. Three studies focused on adults aged 60 and older; one study looked at adults between ages 21 and 65; and one focused on 14- and 15-year-old adolescents.

Dr.kalyan.B. President of gerontological research, New Delhi**, (2002)** in article of Music to ears: Therapy to treat relieve stress in aged, she quoted that experts at the seminar based their opinions on scientific facts and sample studies conducted on depressed old age and the study shows that music has been effective in hospices and old age homes.

Chen et al., (2000) found that the combination of antidepressants with music therapy as more effective than antidepressants alone. This study suggest a potential advantage of adjunctive music therapy for late life depression.Of the existing RCT several points to potential benefits of music therapy for late life depression. Possible mechanisms of action may include the creation of new aesthetic , physical and relational experiences through active music making in a supportive collaboration between patient and therapist. Music may also provide depressed adults with a more comfortable alternative for expressing emotions, which may be particularly challenging for this population. Further research is

needed to differentiate the effects of different forms of music therapy on late life depression.

Hats ell and Beneson et al.,(2000) Music therapy as first reported as an effective treatment of depressive symptoms by and may be particularly effective in helping depressed older adults express their emotions. Subsequent RCTS suggested that potential benefits for late life depression. One study compared therapist delivered music therapy to independent, home based music therapy exercises from a sample of depressed older adults. Results shown that independent, home based exercises here more effective in reducing depressive symptoms.

Journal Of Music Therapy **(2000)** the effect of reminiscence music therapy sessions on changes in depressive symptoms in elderly persons with dementia. This study examined the effectiveness of reminiscence focused music therapy treatment on depressive symptoms in elderly people with dementia. Twenty elderly (3 male & 17 female) who were diagnosed as having dementia and residing at 2 different residential care facilities in Florida were assigned to 1 of 4 small groups. Each of the participants served as his or her own control in an O1 O2 X O3 design. The depressive symptoms were measured using Cornell Scale for Depression in Dementia. Multiple Comparison Procedure indicated statistically significant differences between pretest and posttest 2 as well as posttest 1 and posttest 2, while significant differences were found between pretest and posttest.

Zerhusen et al.,(2000) found music therapy to be less effective than CBT for depressed older adults. The configuration of the two groups differed in both length of sessions and no of participants, raising questions regarding the structural integrity and subsequently the utility

of music therapy intervention used. Music therapy may also be effective for older depressed adults taking antidepressant medications.

Conceptual Framework

A visual or symbolic representation of theoretical framework helps to express abstract ideas in a more readily understandable or precise form than the original conceptualization. Systemic representation of these types can be useful in the research process in clarifying concepts and their association, in a enabling the researcher to plan the specific problem in an appropriate context and revealing areas of inquiry. The present study as based on general system theory with input process, output and feedback. As introduced by Von Ludwig Bertalanffy (1968). According to this theory a system is a group of elements that interact with one another, in order to achieve a goal. An individual is a system because he or she receives input from the environment. This input hen processed provides an output. All living systems are open, in that there is a continual exchange of matters, energy and information. This system is cyclical in nature and continuous.

To be so as long as the four parts (input, output, process and feedback. Keep interacting. If there is change in any part there will be change in all the parts. Feedback from within the system are from the environment provides information, which helps the system to determine whether it is meeting its goal or not.

Input

An input consists of information, material or energy that enters the system. In the present system the elderly people living in the old age home is a system with input from itself and those acquired from outside. The inputs are their background like age, religion, education, professional qualification, occupation, material status, place of stay, duration of stay in the old age home.

Assessment of depression level among depressive clients with the help of standardized geriatric depression scale-II.

Process

After the input is observed by the system, it is processed in a way useful to the system. Process refers to the administration of musical therapy for four weeks to the elderly people in the old age home to achieve the desired output. Preparation of protocol of music therapy.

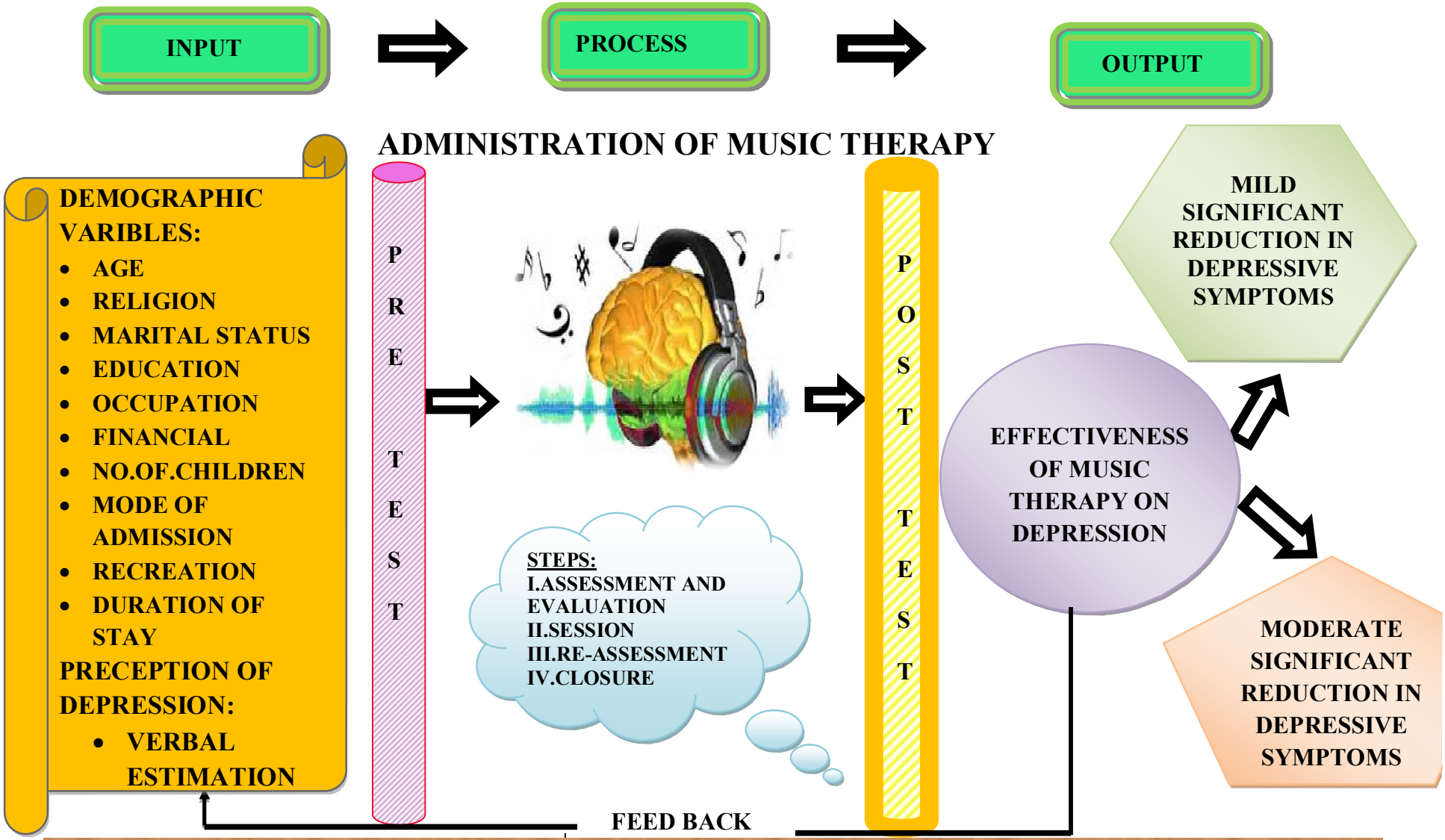
Output

Output from a system is energy, matter of information disposed of the system as a result of its process. In the preset study, it refers to the change in the depression level as a result of administration of musical therapy continuously for four weeks. This is assessed through the comparison of pretest and post test scores. The product or success which results from the system's throughput or processing of technical, social, financial & human input. In this study the output is effectiveness of music therapy finings (the outcome of intervention).results represents whether the level of depression is minimal, mild, moderate, and severe.

Feedback

Feedback is the process that enables a system to regulate itself and provides information about the systems output and its feedback as input. Accordingly the lower the scores obtained by the subjects in the post test, the more effective is the administration of musical therapy. As the feedback the elderly will be motivated to hear the music therapy for four weeks.

A schematic representation of the theoretical framework of the present study based on Von Ludig Bertalanffy's General System theory (1968).



CONCEPTUAL FRAME WORK BASED ON MODIFIED LUDWIGVONBERTALANFFYTHEORY

CHAPTER-III

METHODOLOGY

3.1. Research Approach

Quantitative research approach.

3.2. Data collection period:

The study was conducted for four weeks from 16.07.2015 to17.08.2015

3.3. Study Setting

The study was conducted at Kalaiselvi Karunalaya old age home at west mogapair, Chennai. Kalaiselvi Karunalaya is a non-governmental organization running for 25 years of expertise. Kalaiselvi Karunalaya Social Welfare Society (KKSS) was founded in 1983 by a young zealous post graduate Mr. Purushottam who wanted to educate poorest from most marginalized communities.

Facilities provided are Quality meals and snacks, fruits, Living room with TV and DVD player, Dormitory with separate Beds, Weekly doctor visits, Safe and Hygienic environment, Van to commute. Care in reputed hospitals on medical emergency, Magazines, Yoga/meditation, Personal/hygiene items.

3.4. Study Design

One group pretest and posttest Pre-experimental study design.

Schematic Representation

PRE-TEST	INTERVENTION	POST TEST
O1	X	O2

Key

O1 Pre-test to assess the level of depressive symptoms among the elderly people by geriatric depression scale.

X Music Therapy

O2 Post-test to assess the level of depressive symptoms by geriatric depression scale among the elderly people.

3.5. Study population

The study population of this study is elderly people with depressive symptoms residing in geriatric home.

3.6. Sample Size

A Sample of 60 elderly people who met the inclusion criterion was selected for this study.

3.7.Sampling criterion:

3.7.1. Inclusion Criteria

- Elderly people with depressive symptoms in the age group of 60-70 years.
- Elderly people who are willing during the data collection period.
- Elderly people who are willing to give consent (oral and written) for the study.
- Elderly people who can able to understand and speak Tamil or english.

3.7.2. Exclusion Criteria

- Elderly people who had previous music therapy intervention.
- Elderly people those who are having congenital disorders like hearing disabilities.
- Elderly people who have medical illness like hemiplegic, chronic kidney disease etc

3.8. Sampling Technique

Convenient sampling technique was used to select the 60 samples of elderly people.

3.9. Research Variable

The two categories of variable discussed in this study were

Independent Variable: Music therapy

Dependent Variable: Level of depressive symptoms among elderly people.

3.10. Development and Description of the tool

3.10.1. Development of Tool:

Tool was selected after extensive literature review from the various text book, internet search, guidance and discussion with experts in the field of nursing, psychiatry and statistics. A structured questionnaire was used to collect data from the elderly who are staying in the old age home.

3.10.2. Description of Tool:

The tool consisted of Section A and B

1) ***Section A: Socio – demographic profile***

   It includes socio demographic details such as: age, religion, marital status, education, occupation, financial support, number of children, mode of admission, recreational activities and duration of stay.

2) ***Section B: Structured Questionnaire***

   The structured questionnaire regarding assessment of depressive symptoms by using Geriatric Depression Scale.

   The Geriatric Depression Scale (GDS) is a self-report measure of depression in older adults. Users respond in a "Yes/No" format. The GDS was originally developed as a 30-item instrument. This validation study was formulated by Sheikh and Yesavage in 1986. Of the 30 items, 20 indicate the presence of depression when answered positively while the other 10 are indicative of depression when answered negatively. This form can be completed in approximately 5 to 7 minutes. The GDS may be used with healthy, medically ill and mild to moderately cognitively impaired older adults. It has been extensively used in community, acute and long-term care settings.

Minimum score = 0 Maximum score =1 Questions= 30 Total score=30

0-9	**No depression**
10-19	**Mild depression**
20-30	**Moderate and severe depression**

3.10.3. Content Validity

Data collection tool is an instrument that measures the variables of interest of the study accurately, precisely and sensitively.

Content validity of the tool was obtained from experts in the field of psychiatric nursing, psychiatry, psychology and statistical expert. The experts were an associate professor, psychiatrist and clinical psychologist. The experts were requested to check the relevance, sequence and adequacy of the content. There was uniform agreement of the tool which is adopted to conduct the study. Hence, the investigator precedes the same tool.

3.11. Ethical Consideration

The study objectives, intervention, data collection procedure approved by the Ethics Committee of Madras Medical College, Chennai. The elderly people were explained about the purpose and need for the study. They were assured that their details and answers will be used only for the research purpose. Further they were ensured that their details will be kept confidentially. Thus the investigator followed the ethical guidelines, which were issued by the Ethics Committee after getting a written permission.

3.12. Pilot Study

Pilot study is a trail run for the main study to test the reliability, practicability and feasibility of the study.

The main objectives of the pilot study are to help the researcher to become familiar with the use of tool and to find out the difficulties in the main study. The investigator underwent Music therapy training programme from Radical wisdom school of culture, Anna Nagar, Chennai and obtained a certificate. The pilot study was conducted after getting ethical clearance and the permission from the kalaiselvi karunalaya old age home, mogapair. It was

conducted for a period of one week from 22.06.2015 to 27.06.2015. Sample of 10 elderly people were selected by convenient sampling technique. Informed consent was obtained from them before collection of the data.

Data were collected from the elderly people by structured questionnaire before the implementation of Music therapy. After completion of Music therapy sessions, the elderly people were assessed their depressive symptoms by using same scale. Pilot study samples are excluded in the main study.

3.13. Reliability of the Tool

After pilot study reliability of the tool was assessed by using split - half method. The 'r' value obtained was 0.85 which showed a high positive correlation. Hence the tool was considered reliable.

3.14. Data Collection Procedure

The entire data collection procedure was spread out over a period of four weeks from 16.07.2015 to 17.08.2015. There are 70 old aged people above 60 years are from different parts of Tamilnadu, irrespective of caste, creed and religion, relinquished by family in kalaiselvi karunalaya. Initially the investigator approaches each elderly after getting permission from the Director. The old age home consists of 70 elderly in whom 35 were males and 35 females. Investigator selected 70 elderly people initially. In that 2 of them were dropped due to chronic illness, 3 of them were unable to attend due to their physical inability and 5 were not willing to participate in the study. The investigator selected 60 elderly people as per the inclusion and exclusion criteria. The elderly people were introduced with the whole programme after an introduction and then a written informed consent was obtained from them for willingness to participate in the study. They were assured that their responses and details will be kept confidential and will be used only for the research purpose. Before the tool was administered some informal discussion were made with participants to establish rapport so that they would be relaxed.

The total 60 elderly people were divided into two groups. Each group contained 30 people. Every day the participants were gathered around10AM in the common hall. The pretest questionnaire was administered to them and they

were asked to give appropriate answers for all statements to find out the depressive symptoms level by structured scale before music therapy. First the investigator demonstrated the music therapy steps to first group for 45 to 50 minutes in the morning and evening session per day up to first 2 weeks.

The data was collected in three stages

Stage I (Assessment First Week)

- Informed written consent was obtained to select the samples to conduct music therapy from the concerned authorities of old age home.
- The samples were informed about the purpose and procedure of the study and an informed written consent from the samples were also collected.
- Investigator established rapport with the samples and the purpose of the interview was explained to the study samples.
- Pretest was administered to elderly people of the old age home who were willing to take part in the study. Geriatric depression scale were used to assist the level of depression among elderly people in the old age home.
- Individual having audio logical deficits were excluded from the screened group
- Purposive sampling was done to select the sample.

Stage II (Intervention Second and Third Week)

The investigator encouraged the samples to hear music with the help of the audio (Compact Disc) for 30 minutes as two sessions over a period of 4 weeks under the supervision of the investigator.

Step 1.Assessments & Evaluations

During the first two or three sessions with the elderly people. The investigator uses instruments and a basic session design (greeting & closing songs) that is old melodies songs to collect data. He/she will look at seven skill areas - physical, social, behavioral, cognitive, communicative, creative

and musical. After the data has been collected, individual or group goals and objectives are chosen.

Step2. Sessions

After the goals and objectives are defined, the investigator meets the elderly people on a fixed weekly schedule in an agreed upon location. The duration is from morning 10 am to 12 pm and evening 2 pm to 4pm.Therapy sessions are individually designed to reach the goals stated and the investigator uses music, instruments, song writing, improvisation and movement to support the elderly people in meeting those goals. Elderly people become active and central participants in music making at whatever level they are currently able. After every session, the investigator takes notes to track the progress of the therapy.

Step 3. Re-assessment

Through the process of tracking the elderly people progress, the investigator might re-adjust the goals and objectives either because the first goals have been met or because other more important needs arise. In some cases, where music therapy does not seem to be reaching the desired objectives, the investigator will recommend ending the treatment. However, music therapy can be used as an on-going therapy for elderly people who respond positively and have on-going needs.

Step 4. Closure

The relationship between the investigator and elderly people is a close one. Therefore in the best interest of the elderly people, proper closure is very important, no matter what the reason for ending the therapy is.

Stage III (Reassessment second and third week)

An immediate posttest to the study samples is done to evaluate the changes in the level of depressive symptoms who would have under gone music therapy.

Stage IV (Conclusion fourth week)

With the closure of the music therapy the elderly people are assembled in one room. The investigator thanked everyone for cooperating for the study and also insisted about the importance of hearing music for reducing depressive symptoms.

3.15.1. Intervention protocol:

Place	Kalaiselvi Karunalaya old age home**.**
Intervention	Music therapy
Tool	Geriatric Depression Scale
Duration	Four weeks.
Frequency	Twice a day
Time	Morning 10am to 12pm. Evening 2pm to 4pm.
Administered by	The Investigator
Recipient	Elderly people residing in homes
Procedure	Old melodies song was played through compact disc attached with speaker.

3.15. Data Entry and Data Analysis:

- Demographic variables in categories are given in Frequencies with their Percentages.
- Depression score in given in Mean and Standard deviation
- Quantitative depressive symptoms score in pre-test and post-test will be compared using Student's paired t-test
- Correlation between depression and attitude will be analyzed by using Karl Pearson's Correlation Coefficient.
- Association between demographic variables and depressive symptoms score are analyzed by using Pearson Chi-square test.

SCHEDULE OF DATA COLLECTION PROCEDURE

Day	10.00am to 12pm			2.00pm to 4 .00pm	
Day 1	State about introduction purpose, benefits of music therapy.	Pre-test was conducted		Informed consent was obtained.	Discuss about merits and demerits of music therapy
Day 2	Explanation about the steps and techniques of music therapy were given.	Demonstrate the first step is Assessment and evaluation (seven skill areas - physical, social, behavioral, cognitive, communicative, creative and musical)	**LUNCH BREAK & SLEEP**	Re-demonstration of the first step	Encourage the individual practice and clarification of doubts
Day 3	Reviewing the previous class.	Demonstrated the 2nd step (i.e.) sessions. (music, instruments, song writing, improvisation and movement)		Re-demonstration of the first and the second step	Clarification of doubts in the first 2 steps
Day 4	Group discussion about the first 2 step of music therapy.	Demonstrated the 3rd step. (i.e.) Re-assessment (re-adjust the goals and objectives)		Encouraged to practice third step. It is a very essential one.	Individual practice to overcome the difficulties
Day 5	Encouraged to remember all previous steps of music therapy	Demonstrated the 4th step. (i.e.)closure relationship between the music therapist and his/her clients		Practiced each steps of assessment and evaluation in music therapy.	Clarification of doubts along with group practicing.
Day 6	Reviewing previous steps music session	Making them hear a compact disc, which contains old melodies songs		Re-demonstration of utensils music.	Individual practicing utensils music.
Day 7	Reviewing all the steps from the first class	Demonstrated the utensils that can create audible music.		Re-demonstration of all the steps of music therapy.	Clarification of doubts in session.

Figure3.2 Shows Schematic representation of the study

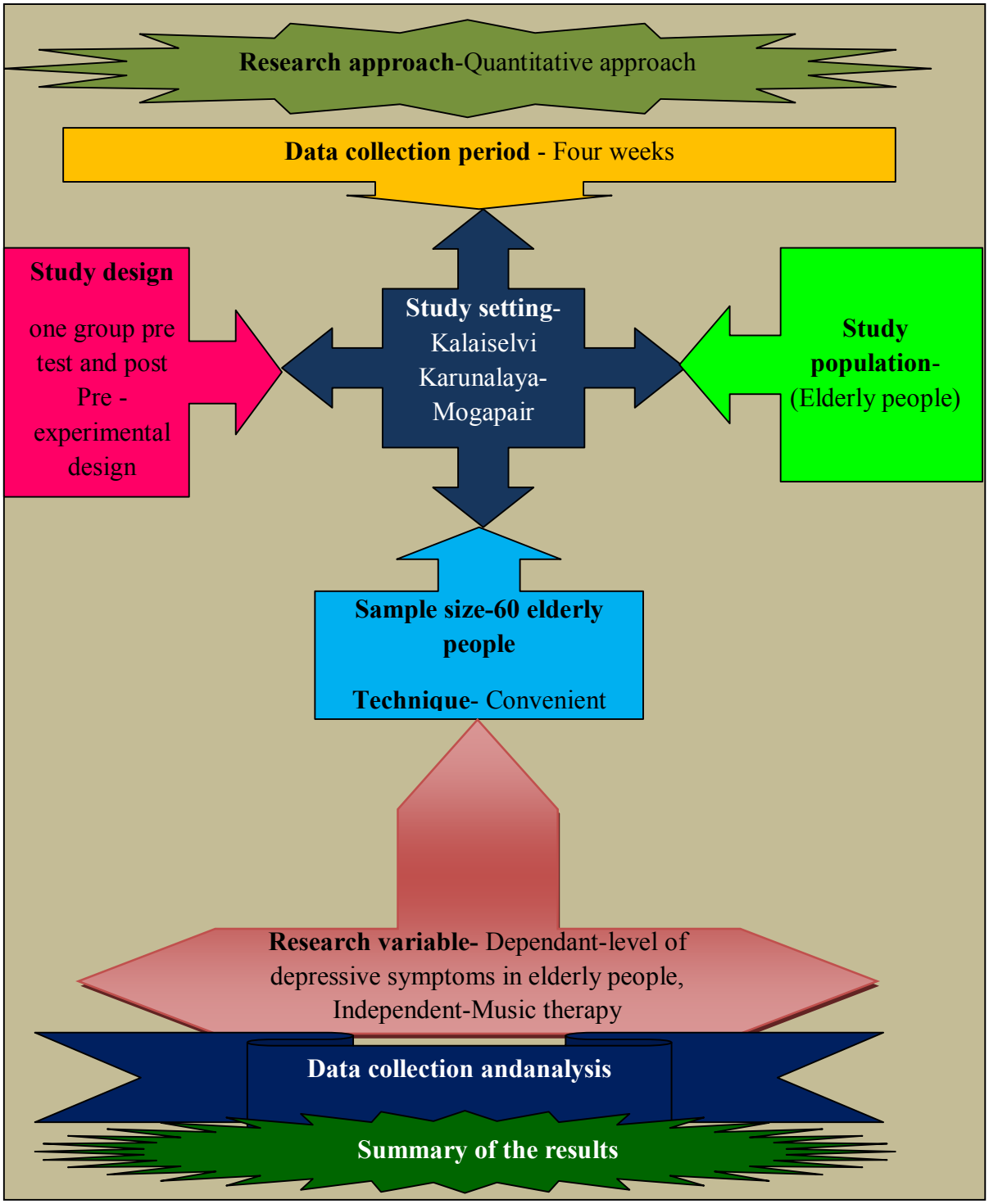
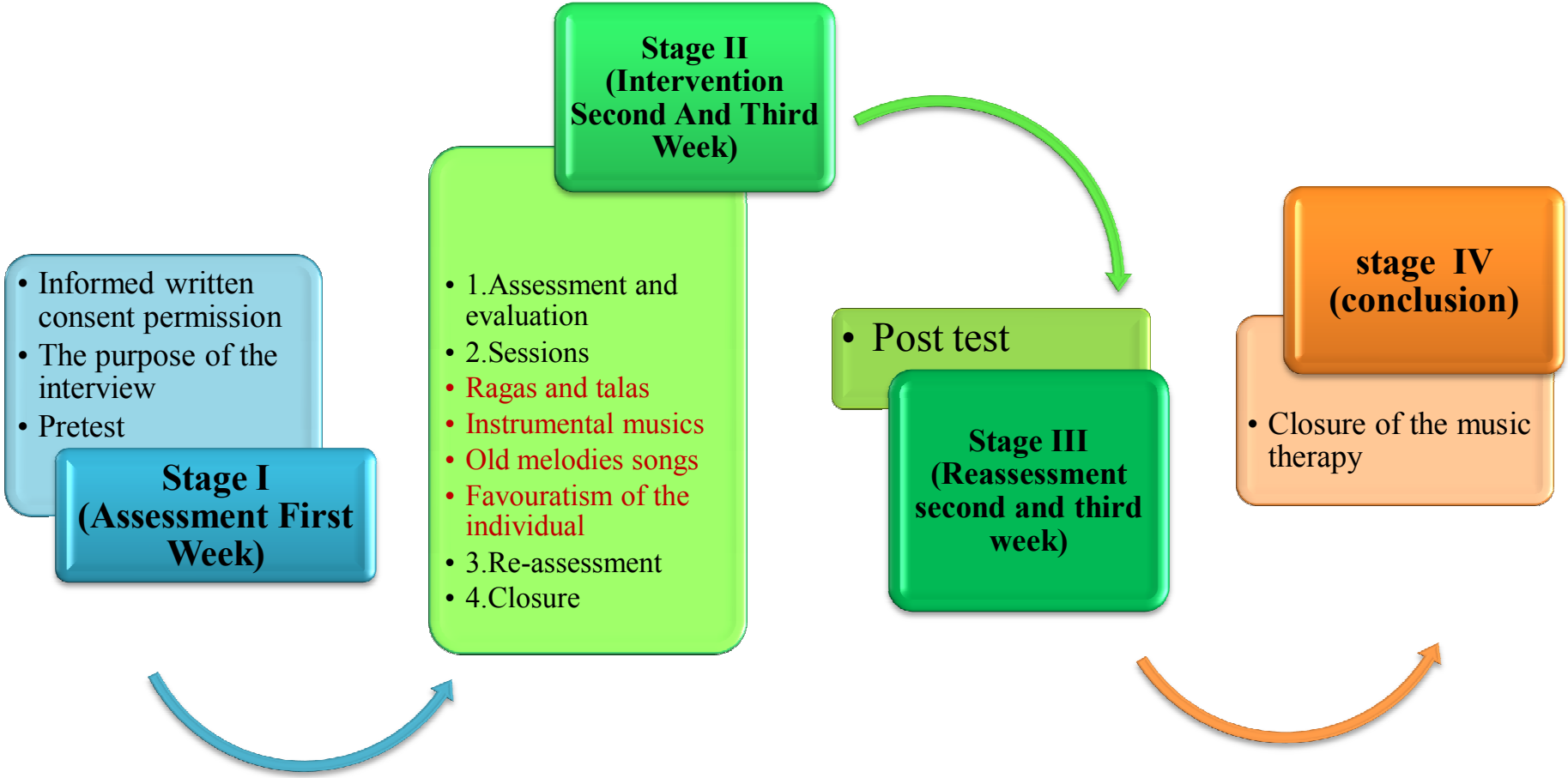


Figure 3.1.Data collection procedure



CHAPTER-IV
DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of the data obtained from 60 elderly people who were staying in Kalaiselvi Karunalaya old age home at West Mogapair. The collected data were tabulated and presented according to the objectives under the following headings

Section-I Socio demographic profile of the elderly people

Section-II Depressive symptoms of the elderly people before music therapy intervention.

Section-III Depressive symptoms of the elderly people after music therapy intervention

Section-IV Effectiveness of the music therapy

Section-V Association between the effectiveness of music therapy with selected demographic variables.

Section I: Socio demographic profile of the elderly people

Table-4.1: Distribution of socio demographic Profiles of the Elderly People

S.No	Demographic variables		Frequency	in %
1.	Age	60 -70 years	8	13.3
		71 -80 years	32	53.3
		> 80 years	20	33.4
2.	Religion	Hindu	27	45.0
		Christian	30	50.0
		Muslim	3	5.0
3.	Marital Status	Married	23	38.3
		Single	17	28.3
		Divorced	1	1.7
		Widowed	19	31.7
4.	Education	No formal education	17	28.3
		Primary	26	43.4
		Higher secondary	15	25.0
		Graduate	2	3.3
5.	Occupation	Governments	1	1.7
		Private	32	53.3
		Business	23	38.3
		Others	4	6.7
6.	Financial Support	Government retired pension	2	3.3
		Old age pension	7	11.7
		Any other	41	68.3
		None of the above	10	16.7
7.	No. of Children	1 or 2	12	20.0
		More than 2	19	31.7
		No children	29	48.3
8.	Mode of Admission	Referred by trust	27	45.0
		Voluntary admission	23	38.3
		From the children	4	6.7
		Others	6	10.0
9.	Recreation	Watching TV	24	40.0
		Listening music	19	31.6
		Reading books	7	11.7
		Talking with others	10	16.7
10.	Duration of Stay	Below one year	12	20.0
		2 - 3 years	20	33.3
		3 - 5 years	18	30.0
		> 5 years	10	16.7

Table 4.1: Shows the demographic information of elderly people who participated in this study.

- Among the elderly people, the age group of 60-70 years is (13.3%), 71- 80 years is (53.3 %),>80 years is (33.4%).
- Religion wise (40%) is Hindu, (50.0%) is Christian and (5.0%) is Muslim of the elderly people.
- As far as the educational status of the elderly people is concerned, (28.3%) had no formal education, (43.4%) had Primary education, (25.0%) had higher secondary education and (3.3%) graduate.
- In case of Marital status (38.3%) were Married, (28.3%) were single, (1.7%) were divorced, (31.7%) were widowed.
- According to their occupational status, elderly people who worked in government job are (53.3%), in private sector is (53.3%), doing business (38.3%) and occupied with other jobs were (6.7%).
- Elderly people receiving other sources of financial support is (68.3%), receiving government retired pension is (3.3%), receiving old age pension is (11.7%) and receiving none of the financial support is (16.7%).
- Among the respondents, (48.3%) have no children, (31.7%) have more than two children, (20.0%) have one or two children.
- Among elderly (45.0%) got admitted in the old age home is referred by trustee, (38.3%) are admitted voluntarily, (6.7%) were admitted by their children, (10.0%) are admitted through other mode.
- Forty percent of the elderly were watching TV, (31.6%) were listening music, (11.7%) were reading books, (16.7%) were talking with friends in their leisure time.
- Among elderly people (20.0%) are staying below one year, (33.3%) were staying for 2-3 years,(30.0%)were staying 3-5 years , (16.7%) are >5years in the old age home.

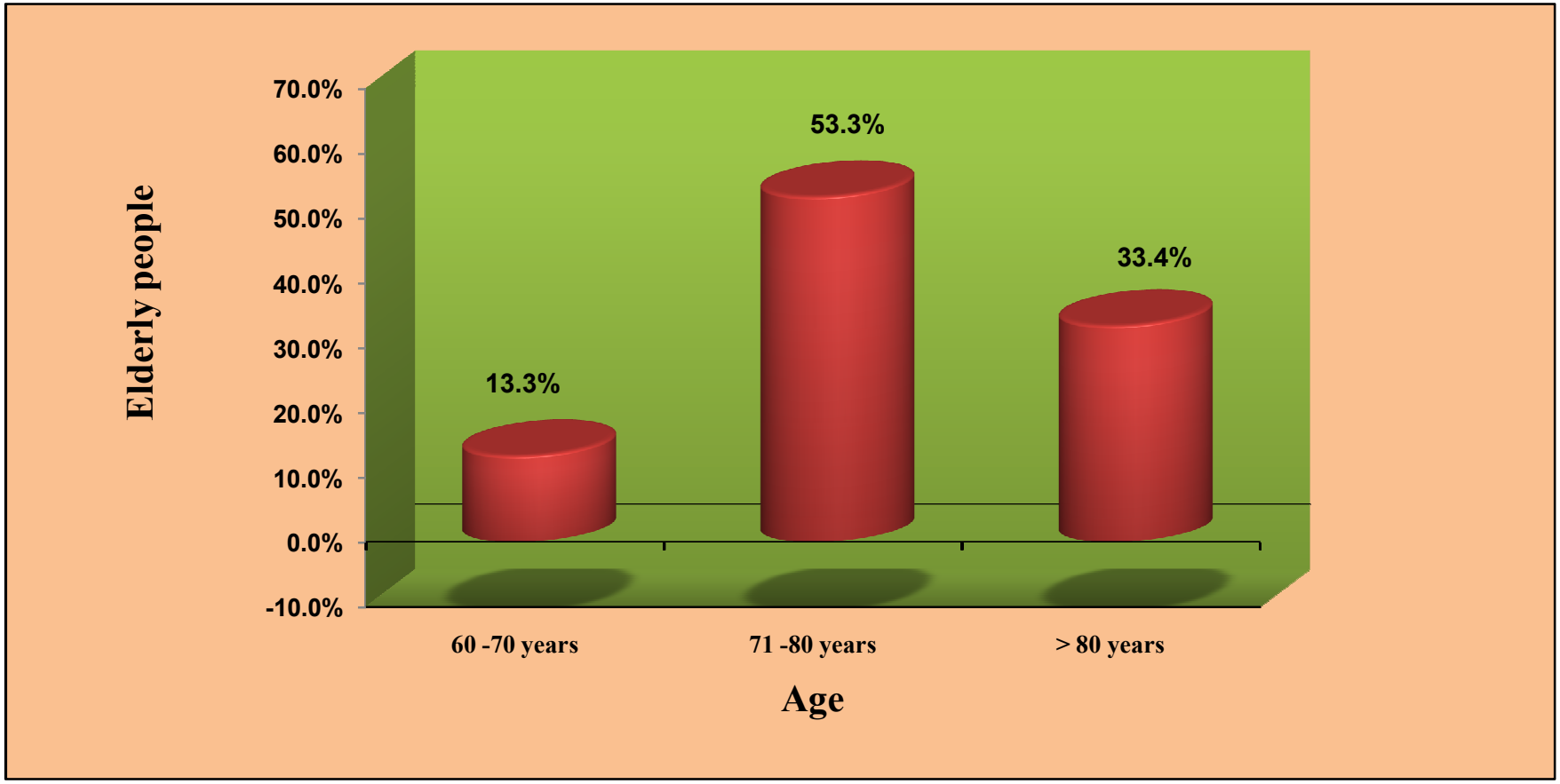


Fig 4.1 Age wisedistribution of the elderly people

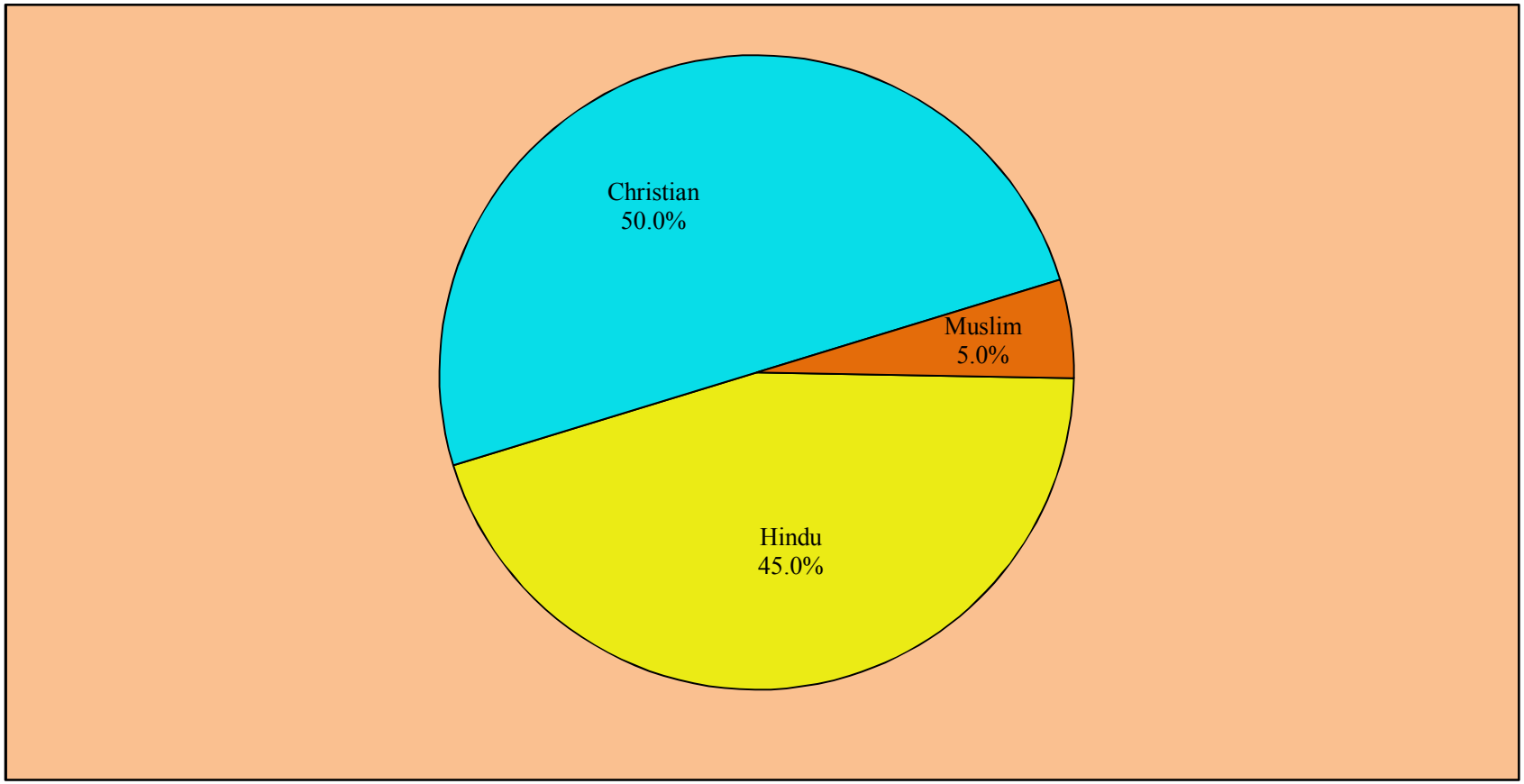


Fig 4.2 Religion wise distribution of the elderly people

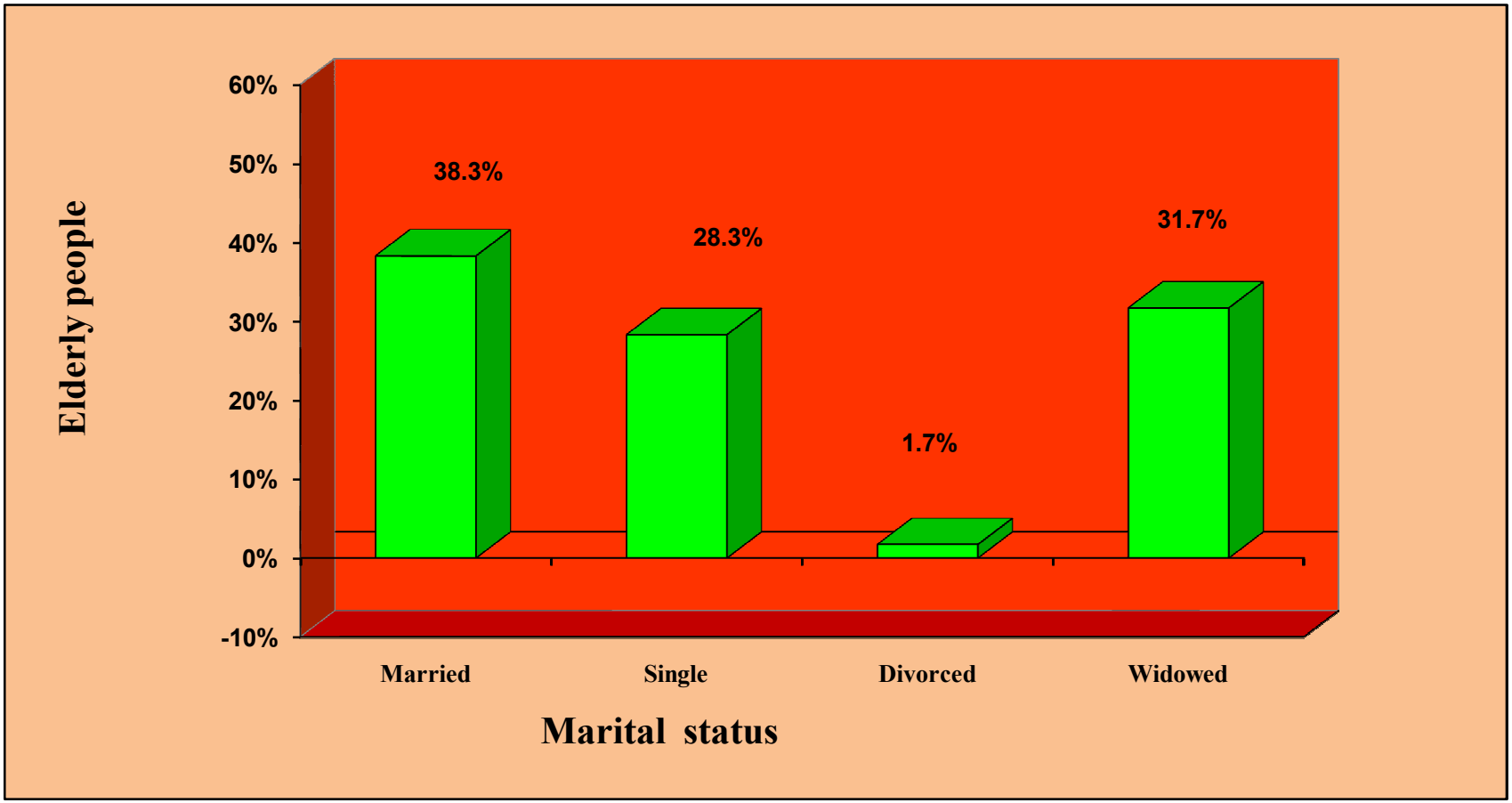


Fig 4.3 Marital status of the elderly people in geriatric home.

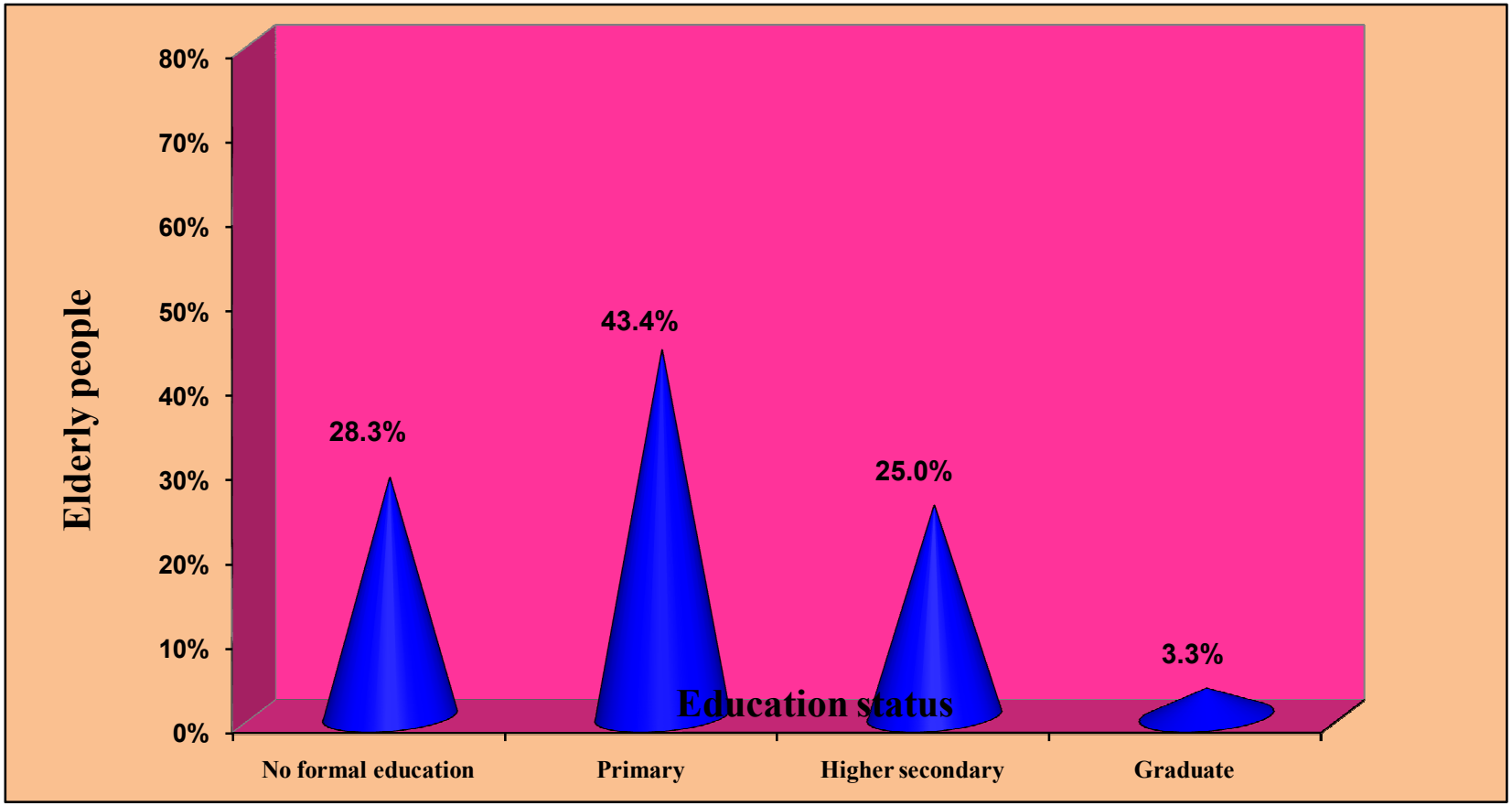


Fig 4.4 Educational status of the elderly people in geriatric home

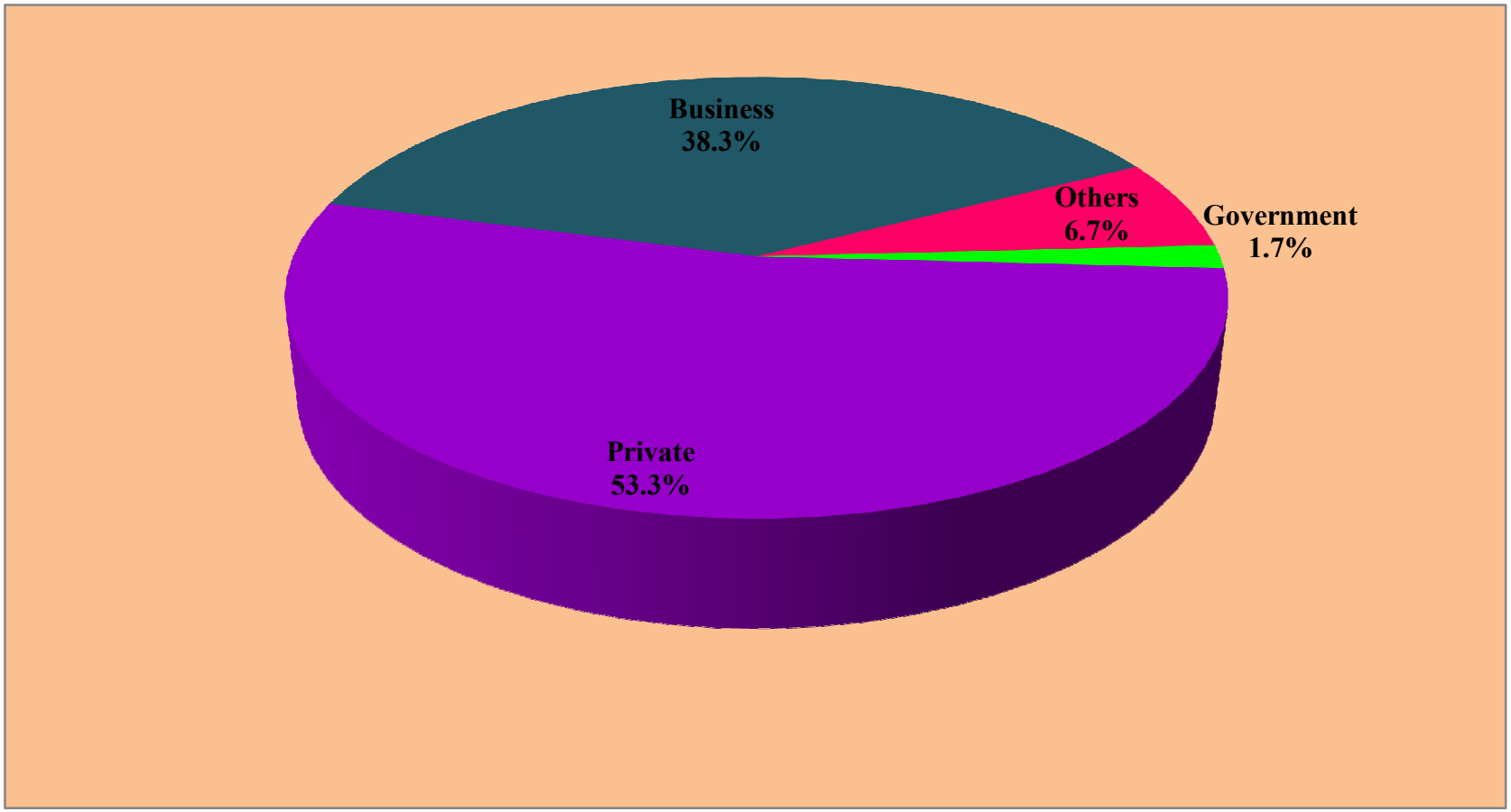


Fig 4.5 Occupational status of the elderly people in geriatric home.

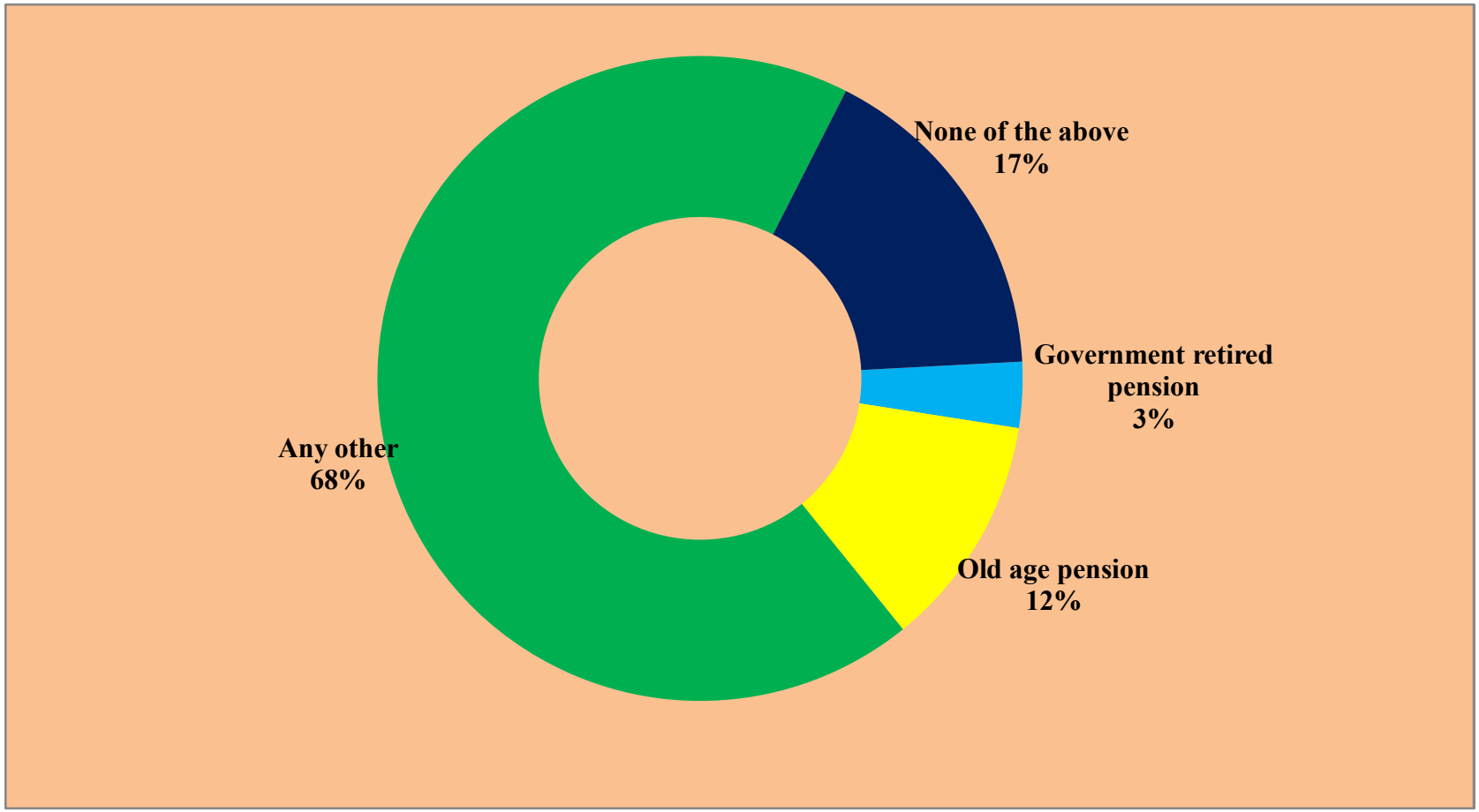


Fig 4.6 Financial support of the elderly people in geriatric home.

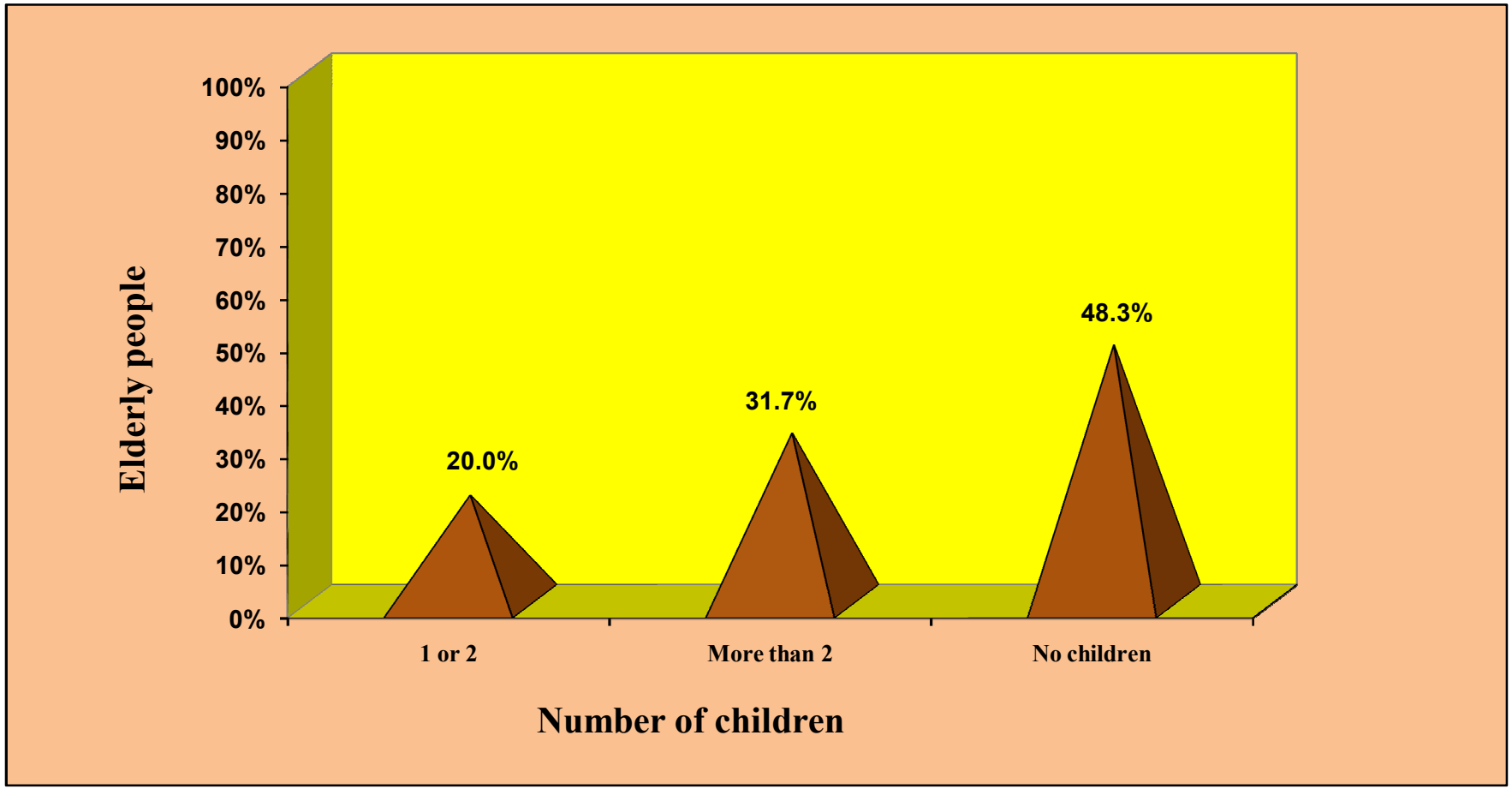


Fig 4.7 Elderly people and their number of children in geriatric home.

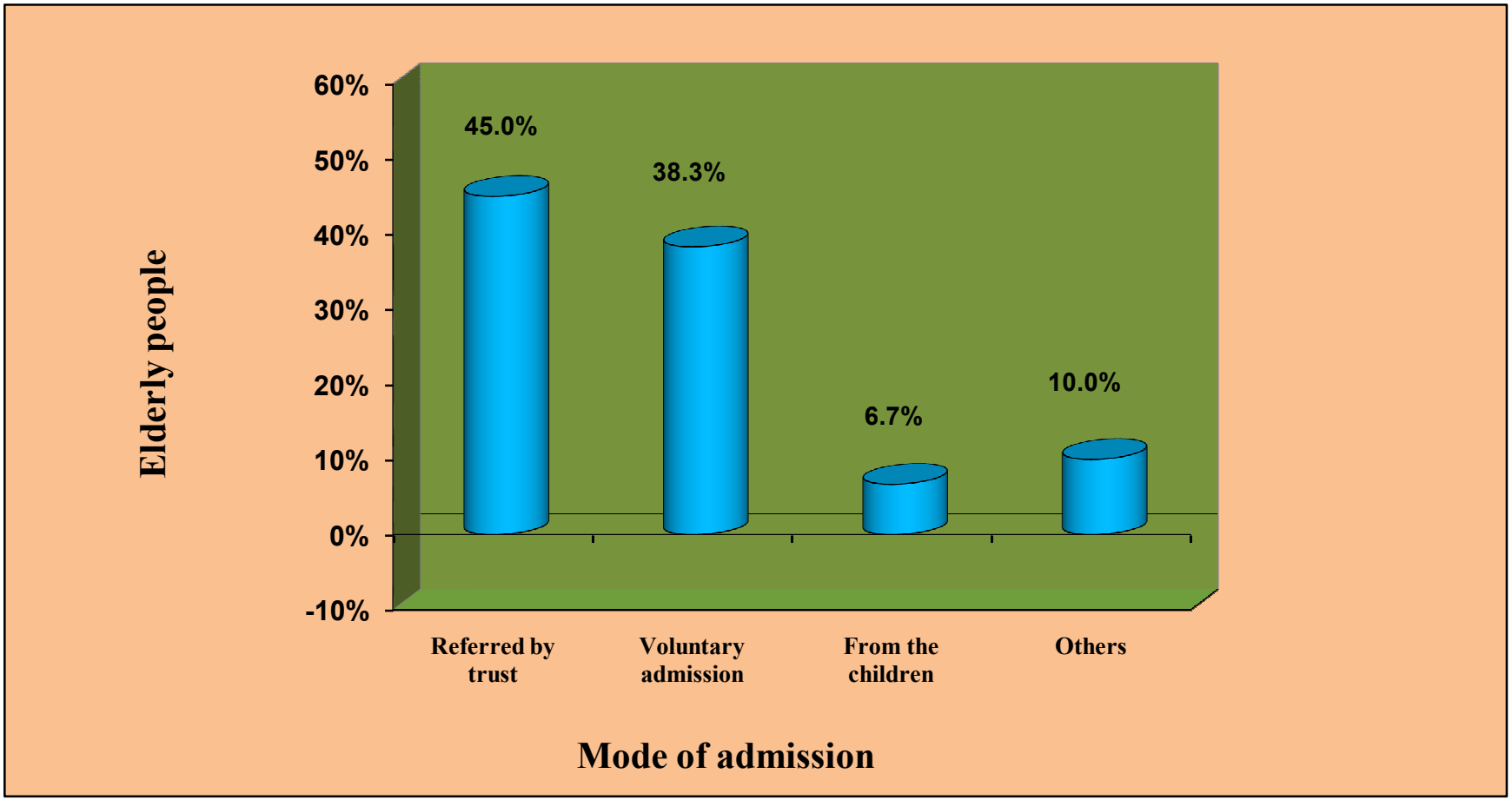


Fig 4.8 Mode of admission of the elderly people in geriatric home.

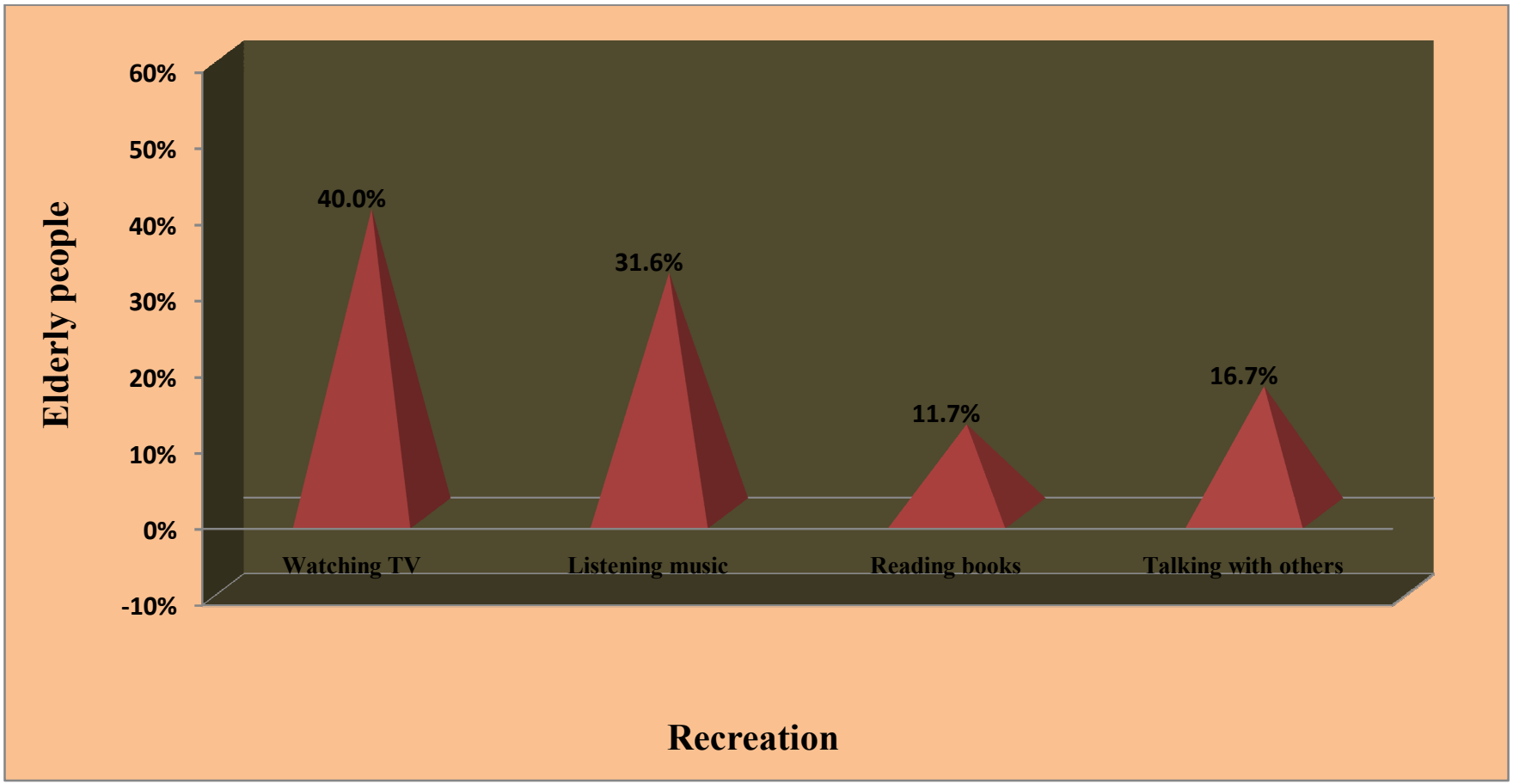


Fig 4.9 Recreational activities of the elderly people in geriatric home.

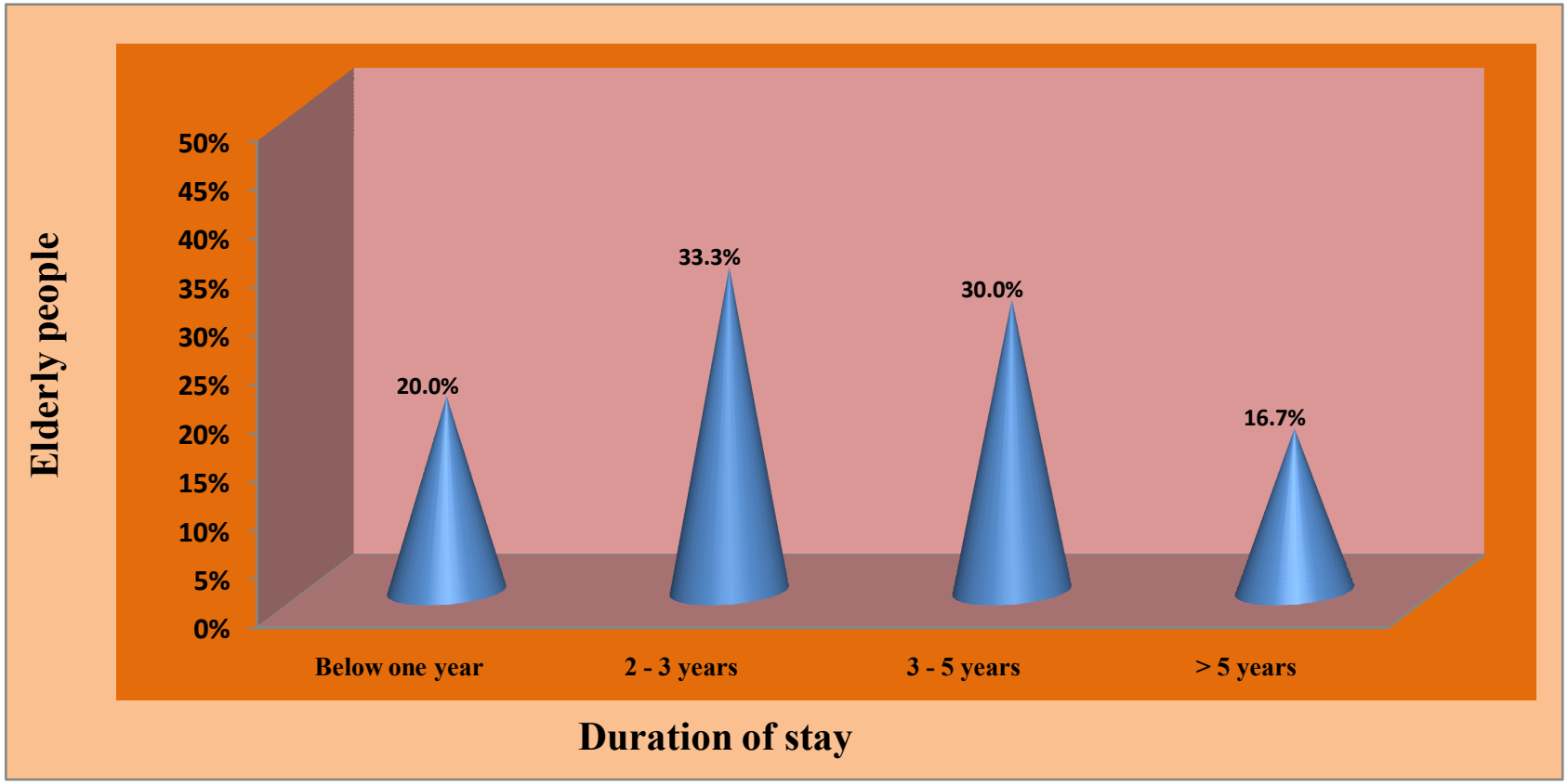


Fig 4.10 Duration of Stay of the elderly people in geriatric home.

Section II Depressive symptoms of the elderly people before music therapy intervention.

Table 4.2: Pretest Level of depressive symptom Score

Level	Frequency	in %
No depression	0	0.0
Mild depression	44	73.3
Moderate and severe depression	16	26.7
Total	**60**	**100**

Table **4.*2*:** Shows pretest level of depressive symptoms score among elderly people. *None of them have no depression score, 73.3% of them have mild depression score and 26.7% of them have severe depression score.*

Score Interpretation

Minimum score = 0 Maximum score =1 questions= 30 Total score=30

Scoring	**Interpretation**
0 – 9	No depression
10 – 19	Mild depression
20 – 30	Moderate and severe depression

Section III Depressive symptoms of the elderly people after music therapy intervention

Table 4.3: Posttest Level of depressive symptom score

Level	Frequency	in %
No depression	28	46.7
Mild depression	32	53.3
Moderate and severe depression	0	0.0
Total	**60**	**100**

Table 4.3 shows posttest level of depressive symptoms score among elderly people. 46.7% of them have no depression score, *53.3% of them have mild depression score and none of them have severe depression score.*

Section IV Effectiveness of the music therapy

Table: 4.4 Comparison of Pretest and Posttest Level of Depressive Symptoms Score

Level	Pretest		Posttest		Chi-square test
	Frequency	in %	Frequency	in %	
No depression	0	0.0	28	46.7	**χ2=45.89 P=0.001*** DF=2**
Mild depression	44	73.3	32	53.3	
Moderate and severe depression	16	26.7	0	0.0	
Total	**60**	**100**	**60**	**100**	

* Significant at P≤0.05 ** highly significant at P≤0.01 *** very high significant at P≤0.001

Table: 4.4 Assess the **Pretest And Posttest Level of Score**.

Before Administration of **Music therapy**, *none of them have no depression score, 73.3% of them have mild depression score and 26.7% of them have severe depression score.*

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After Administration ***of Music*** **therapy**, *46.7% of them have no depression score, 53.3% of them have mild depression score and none of them have severe depression score. Chi-square test was used to calculate the statistical significance.*

Section V

Table 4.5: Comparison of Pretest and Posttest Score

	Frequency	Mean ± SD	Mean Difference	Student's paired t-test
Pretest	60	16.72±3.88	8.42	**t=20.62**
posttest	60	8.30±2.16		**P=0.001*** **

* Significant at P≤0.05 ** highly significant at P≤0.01 *** very high significant at P≤0.001

Table 4.5 shows the comparison of depressive symptoms score between pretest and posttest.

In pretest, elderly people have 16.72 score where as in posttest they have 8.30 score, so the difference is 8.42. This difference between pretest and posttest is large and it is statistically significant. *Differences between pretest and posttest score is analyzed using paired t-test.*

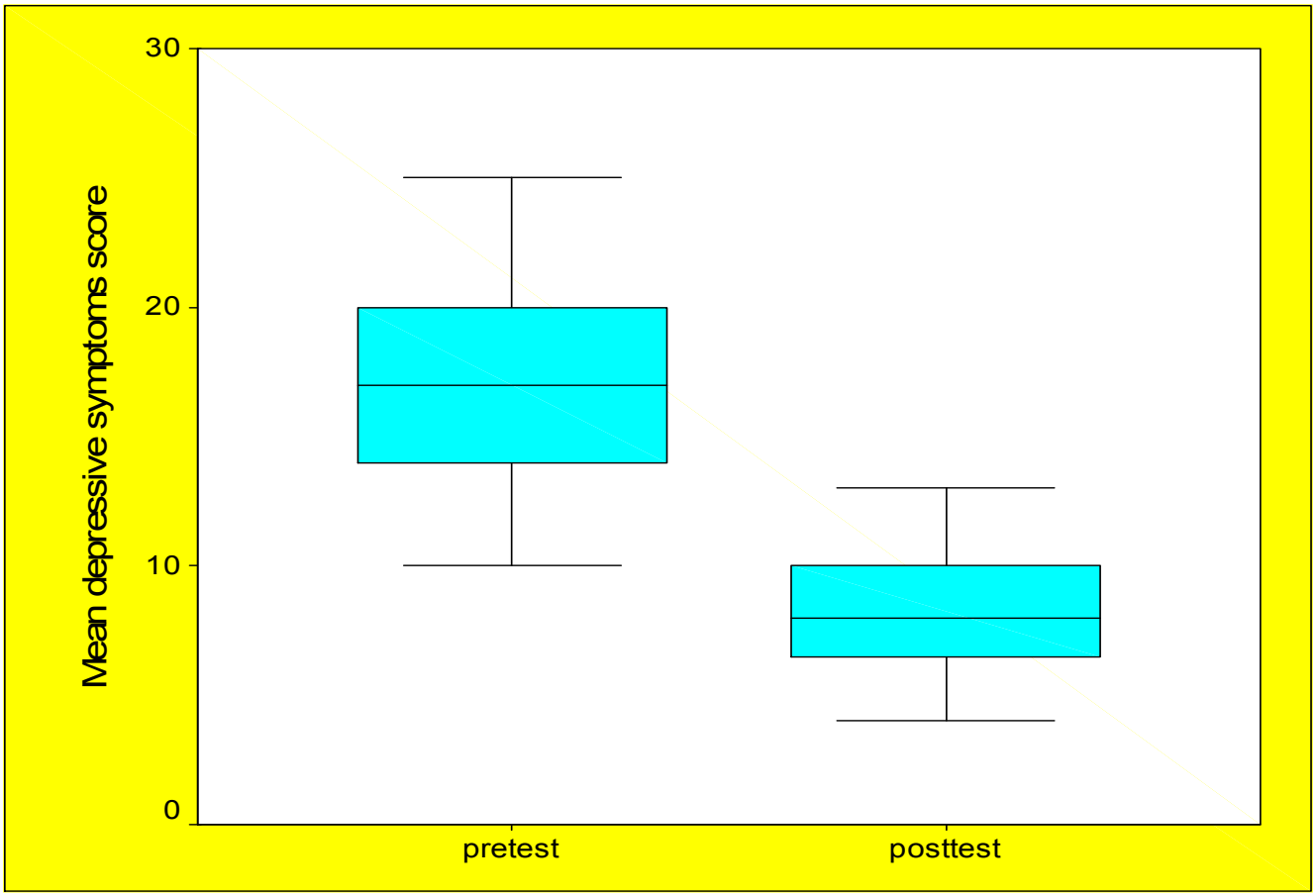

Fig 4.11: Comparison of Pre and Post-test mean Depressive Symptoms score among elderly people

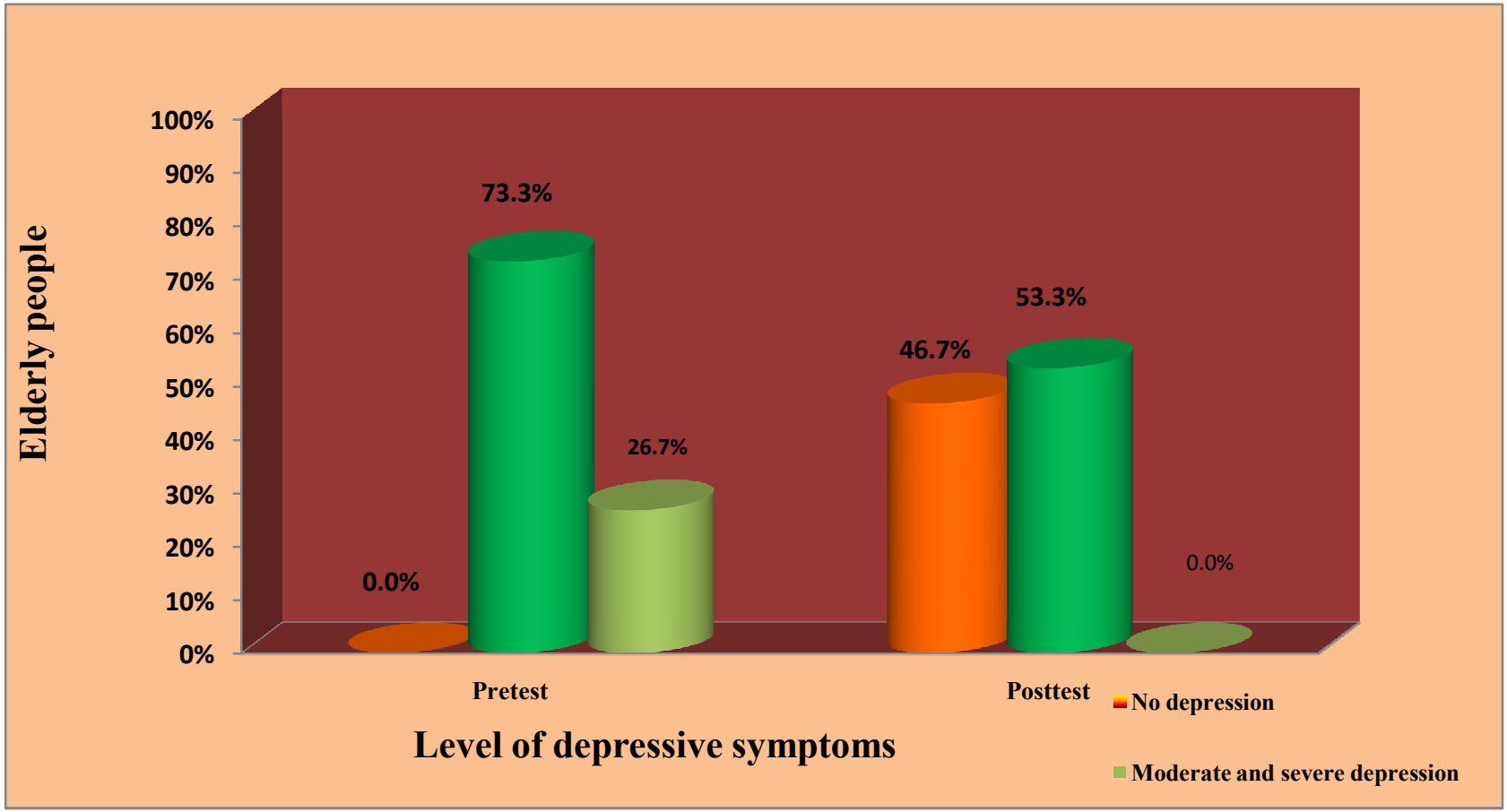

Fig 4.12Comparison Pre and Post-test level of depressive symptoms score

Section VI

Table 4.6 Effectiveness of Music Therapy

	Max score	*Mean score*	Mean Difference in Depressive symptoms score with 95% Confidence interval	Percentage of Depressive symptoms reduction score with 95% Confidence interval
Pretest	30	16.72	8.42(7.60 – 9.23)	28.1 (25.3 –30.8)
Posttest	30	8.30		

Table 4.6 shows the effectiveness of music therapy

After music therapy, Post test depressive score had reduced to 28.1%. Differences between pretest and posttest score was analyzed using percentage with 95% CI and mean difference with 95% CI.

Section VII

Table 4.7: Association between level of depressive symptoms reduction Score and elderly people demographic variables

S.NO	Demographic Variables		Level Depressive symptoms reduction score				Total	Chi square test
			Below average(≤8.42)		Above average(>8.42)			
			Frequency	In %	Frequency	in %		
1.	Age	60 -70 years	2	25.0	6	75.0	8	**χ^2=8.12 P=0.02* DF=2**
		71 -80 years	13	40.6	19	59.4	32	
		> 80 years	15	75.0	5	25.0	20	
2.	Religion	Hindu	10	37.0	17	63.0	27	χ^2=4.28 P=0.11 DF=2
		Christian	19	63.3	11	36.7	30	
		Muslim	1	33.3	2	66.7	3	
3.	Marital status	Married	13	56.5	10	43.5	23	χ^2=1.92 P=0.58 DF=3
		Single	9	52.9	8	47.1	17	
		Divorced	0	0.0	1	100.0	1	
		Widowed	8	42.1	11	57.9	19	
4.	Education	No formal education	12	70.5	5	29.5	17	**χ^2=11.89 P=0.01 ** DF=3**
		Primary	15	57.7	11	42.3	26	
		Higher secondary	3	20.0	12	80.0	15	
		Graduate	0	0.0	2	100.0	2	
5.	Occupation	Government	1	100.0	0	0.0	1	χ^2=6.13 P=0.10 DF=3
		Private	20	62.5	12	37.5	32	
		Business	8	34.8	15	65.2	23	
		Others	1	25.0	3	75.0	4	
6.	Financial Support	Government retired pension	0	00.0	2	100.0	2	**χ^2=7.91 P=0.05* DF=3**
		Old age pension	2	28.6	5	71.4	7	
		Any other	20	48.8	21	51.2	41	
		None of the above	8	80.0	2	20.0	10	
7.	No. of Children	1 or 2	6	50.0	6	50.0	12	χ^2=4.26 P=0.11 DF=2
		More than 2	6	31.6	13	68.4	19	
		No children	18	62.1	11	37.9	29	
8.	Mode of admission	Referred by trust	13	48.1	14	51.9	27	χ^2=0.74 P=0.84 DF=3
		Voluntary admission	11	47.8	12	52.2	23	
		From the children	2	50.0	2	50.0	4	
		Others	4	66.7	2	33.3	6	
9.	Recreation	Watching TV	9	37.5	15	62.5	24	χ^2=4.62 P=0.20 DF=3
		Listening music	13	68.4	6	31.6	19	
		Reading books	4	57.1	3	42.9	7	
		Talking with others	4	40.0	6	60.0	10	
10.	Duration of stay	Below one year	5	41.7	7	58.3	12	**χ^2=8.02 P=0.05* DF=3**
		2 - 3 years	6	30.0	14	70.0	20	
		3 - 5 years	11	61.1	7	38.9	18	
		> 5 years	8	80.0	2	20.0	10	

* Significant at P≤0.05 ** highly significant at P≤0.01 *** very high significant at P≤0.001

Depressive symptom reduction score = pretest-posttest

Table 4.7 shows the association between the levels of depressive symptom reduction scores with the socio demographic variables. Demographic variables such as age, education, financial support and duration of stay shows statistical significance when correlated with level of depressive symptom reduction score. Statistical significance was calculated using chi square test.

The other variables such as Religion, Marital status, Occupation, No.of.children, Mode of admission, Recreation have no statistical significance when correlated with level of depressive symptom reduction score.

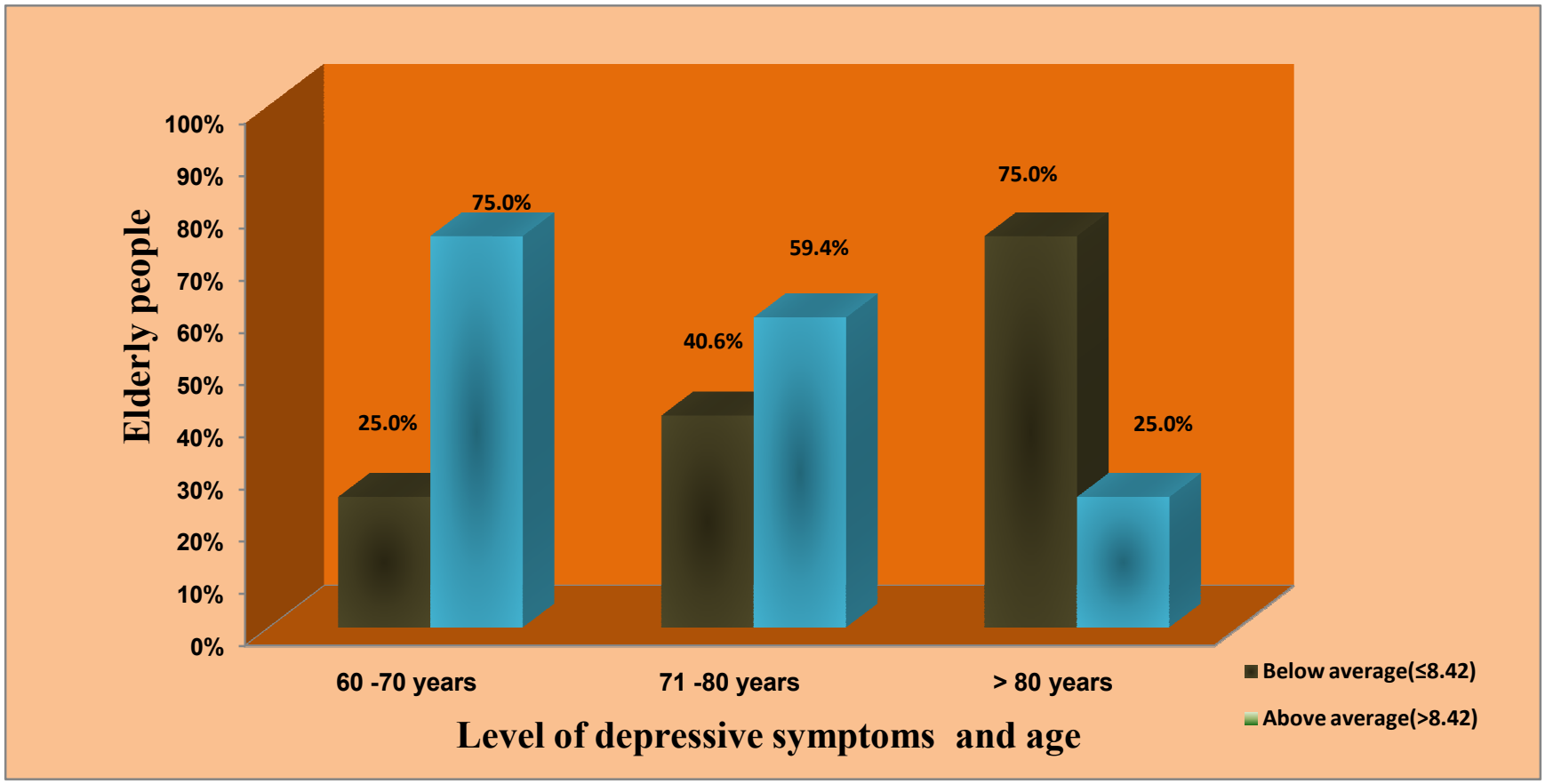

Fig 4.13. Association between level of depressive symptoms reduction score with the age of the elderly people

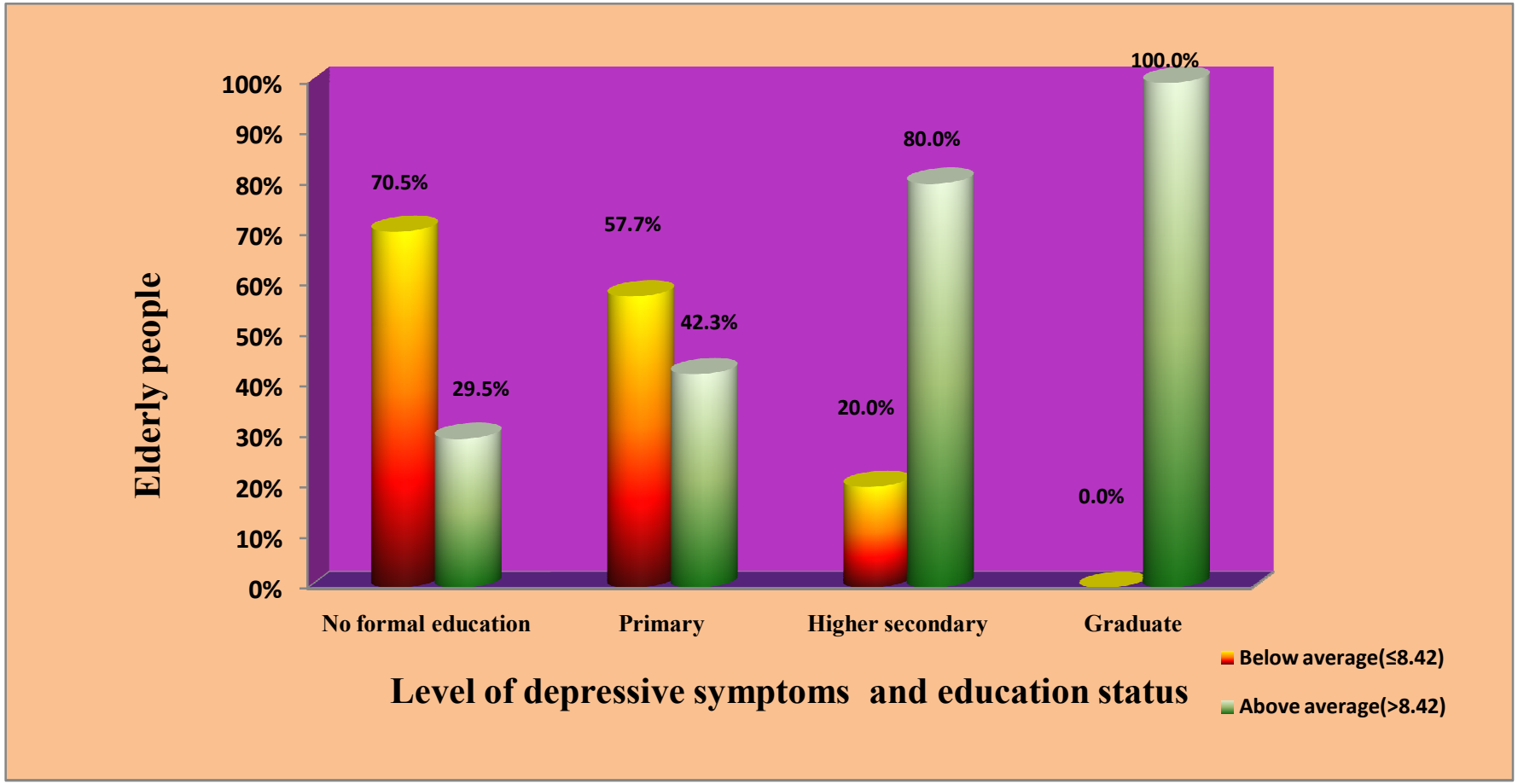

Fig 4.14 Association between level of depressive symptoms reduction score and educational status

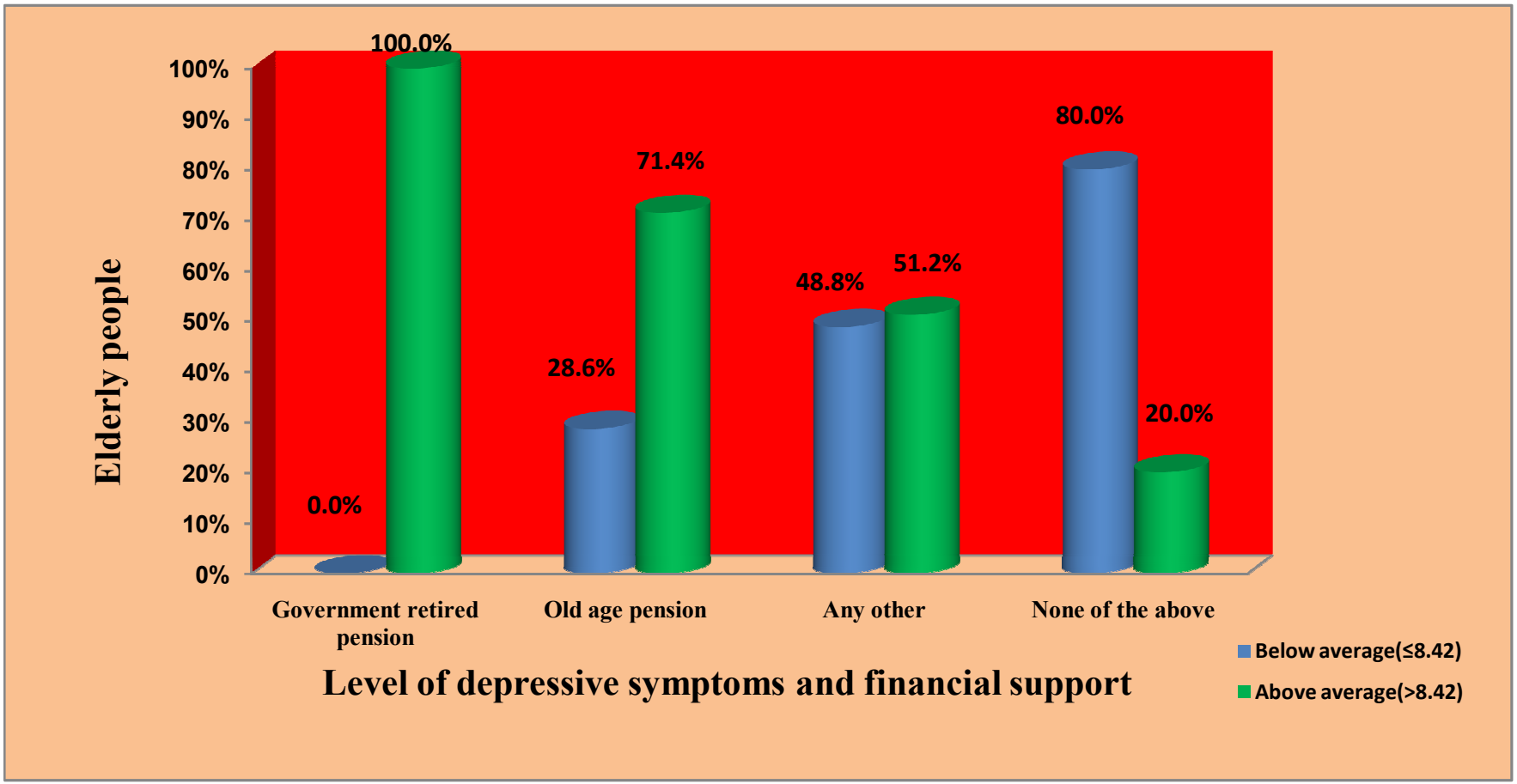

Fig 4.15 Association between level of depressive symptoms reduction score and financial support

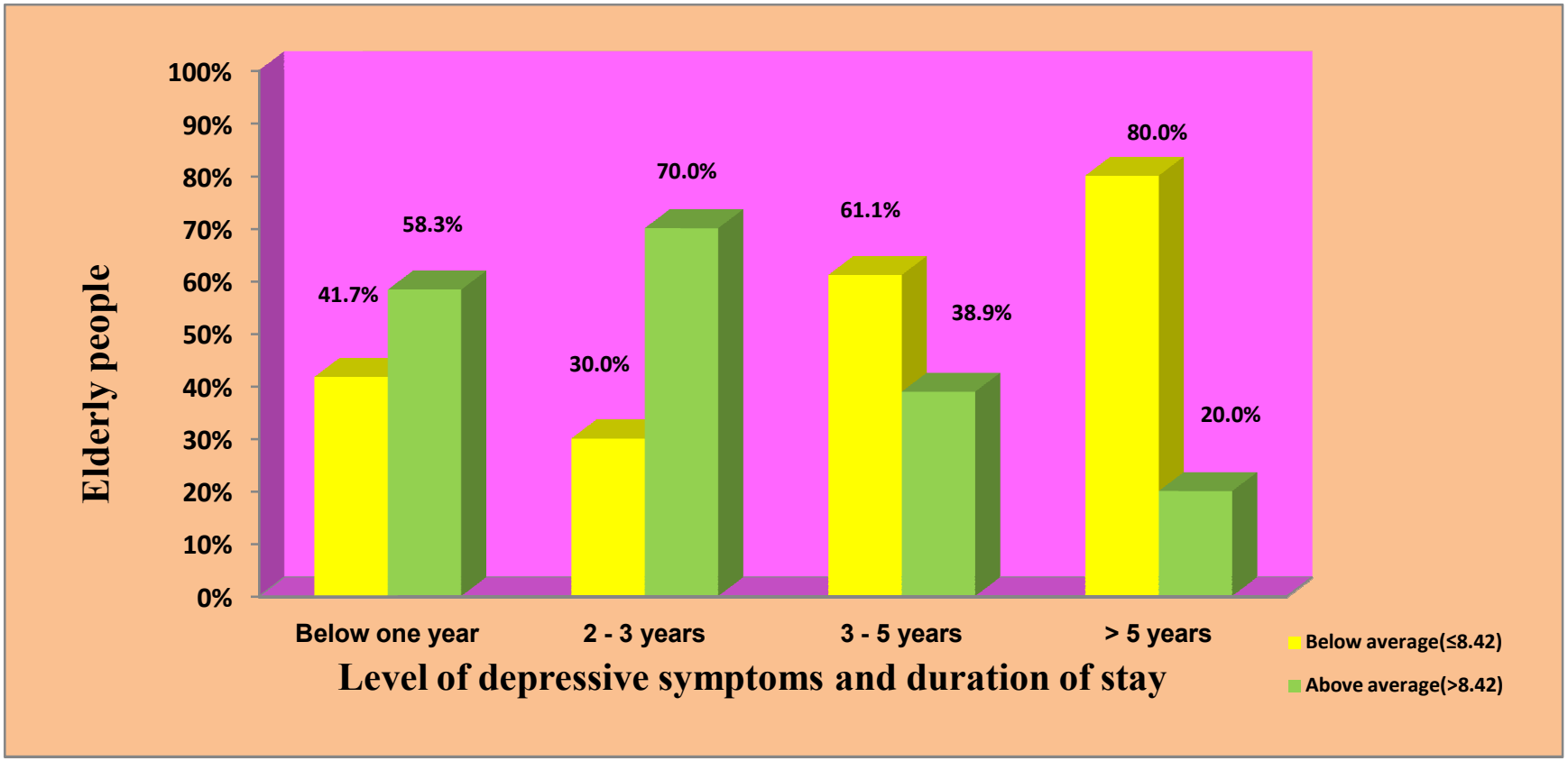

Fig 4.16 Association between level of depressive symptoms reduction score and duration of stay in old age home

CHAPTER V

SUMMARY OF RESULTS

This chapter deals with the major findings of the study.

5.1. Findings of socio demographic variables of the elderly people

- Among the elderly people, (53.3 %) of the elderly people belong to the age group of 71- 80 years.
- Religion wise, (50.0%) of the elderly people are Christians.
- As far as the educational status of the elderly people is concerned, (43.4%) of the elderly people had Primary education.
- Among the elderly people, (38.3%) are married.
- According to their occupational status, (53.3%) belongs to private sector.
- Higher proportions of (68.3%) of the elderly people get other sources of financial support.
- Among the respondents, almost half of the people (48.3%) have no children.
- Most of the elderly, (38.3%) got admitted in Old Age Home are referred by trustee.
- As per their recreational activities, (40%) of the elderly are watching TV.
- (33.3%) of elderly are staying in the old age home for 2-3 years.

5.2. Finding the depression level of elderly people before Music therapy

Before administering the music therapy, the elderly people depression score is (100%). Grading the level of depression score before music therapy with the score of moderate (73.3%) and 26.7% of them have severe depression and none of them have no depression.

5.3. Finding the depression level of elderly people after music therapy

In post-test, level of depression score of elderly people after music therapy, 0%of them have severe depression, 53.3% of them have mild depression and 46.7% of them have no depression.

In comparing mean depression score, the differences between pre-test and post-test and it shows statistically significant (P=0.001).Overall depression score of elderly people between pre-test and post-test difference is 8.42.

5.4. Finding the effectiveness of music therapy with regarding to depression level in elderly people

The pre-test and post-test level of depression score among elderly people before music therapy is 73.3% of them have mild to moderate depression, 26.7% of them have severe depression. After music therapy, 46.7% of the elderly have no depression, 0% of them have severe depression, and 53.3% of them have mild to moderate depression. The post-test depression score have statistically significant.

The comparisons of overall depression score between pre-test and post-test. The elderly people reduced by 28.1% of depression symptoms after music therapy. Differences between pre-test and post- test score was analyzed using proportion with 95% CI and mean differences with 95% CI. This results showed that the effectiveness of the music therapy.

5.5. Finding the association between depressive symptoms with the selected demographic variables

There is association in the level of depression score and their demographic variables like age of elderly, educational status, financial support and duration of stay shows statistically significant.

CHAPTER VI

DISCUSSION

This chapter an attempt is made to highlight the important findings of the present study and to discuss them by comparing and contrasting with findings of the earlier studies. The aim of the study is to evaluate the effectiveness of music therapy on depressive symptoms among elderly people in selected geriatric homes. The findings of the study were discussed under the following sections.

Objective: I To identify the socio demographic variables of the elderly people in selected geriatric home at Chennai.

Age: Analyses in the demographic data revealed that among 60 elderly people in the old age home the majority of 32 (53.30%) were between 71 to 80 years,20(33.4%) were above 80 years,8(13.3%)were between 60 to 70 years. Most of the studies related to Geriatric depression involved elderly whose ages were more than 60 years.

Religion: Among the study subjects, the elderly people belongs to Hindu were 27(45%), subject belongs to Christian were 30(50%) and Muslims 3 (5%).Most of the subjects are from Christian religion.

Marital Status: Majority of the study subjects of 23(38.3%) were married, 19(31.7%) of them were Widowed, 17(28.3%) were single. only one subject (1.7%) was a divorcee.

Seby K, Choudary S, Rudhra Parasad C(2011) In a south Indian community study conducted in Vellore it was reported that the married persons were 48.1% ,Widowed were 51.4% and 0.5% were unmarried. The disparity in the value of may be due to the comparatively small sample size of the present study but it is clear that loss of the spouse could make the elderly lonely at home and they might choose to reside at an old age home. In their study on physical and psychiatric morbidity in urban Geriatric population have

stated that being widowed single or separated status is an independent risk factor for developing depression in elderly.

Education: With regards to their education qualification 26(43.4%) of the study subjects had studied up to primary school, 15(25%) up to secondary school,17(28.3%) were no formal education,2(3.3%) complete the graduation.

Rajkumar AP et al.,(2009) revealed majority 66.1% had no formal education and 19.5% were dropout at primary level of education and only 2.6% had secondary education.

M Sherina, Rampell L S (2005) were depicted that 17.7% of the study subject had no formal education,56.3% had primary education and 9% completed secondary education this may be due to the fact that researcher had restricted the study population to the senior citizen staying in the particular old age home where most inmates were educated.

Occupation: Among the study subjects, the elderly people of 32(53.3%) had skilled private jobs such as clerical works, receptionist etc., 23(38.3%) had performed business, 4(6.7%) engaged in other jobs, only 1(1.7%) had perform government jobs none of them working at present.

Mohanan P, Sajjan B S,(2005) were among the inmates of old age home 63% were employed in the past and now all are unemployed. All the study subjects were currently not working which could add to their dependency, depletion of the already existing financial resources and also to the shrinkage of the social networks which added to their depression.

Financial Support: Among the study subjects 41(68.3%) get income from any other resources, 10(16.7%) receive no income, 7(11.7%) of them receiving old age pension and only 2(3.3%) are receiving Government pension. This may be adding some more shrinkage in social network which leads to depressive symptoms.

No of Children: 29(48.3%) had no children, 19(31.7%) have more than 2 children, 12(20%) were having 1 to 2 children.

Mode of Admission: Among the study subjects 27(45%) were referred from trusty, 23(38.3%) were voluntarily admitted, 6(10%) were referred from others, 6.7% are admitted by their children.

Recreation: Among the study subjects24 (40%) were watching TV, 19(31.6%) use to listen music, 10(16.7%) will talk with others,7(11.7%) of them will read books,

Duration of study: Among the study subjects 20(33.3%) were staying for 2 to 3 years, 12(20%) were staying less than 1 year, 18(30%) were staying 3 to 5 years, 10(16.7%) were staying more than 5 years.

The study consistent with this study which was conducted by**Serap Sezgin,Msc et al., (2004)** The mean age and standard deviation of the study group was 69.60 ±5.6 years; the ages of 83% (n=249) of the subjects were between 65-74 years. 54.7% (n=164) were males, 32.7% (n=98) were widows, 43.7% (n=131) were illiterate, 81.3 % (n=244) had a health assurance and 65.3% (n=196) had a history of chronic diseases. About 39.7% (n=119) have been living with their children and 63.3% (n=190) stated that they were satisfying from their family environment .The mean monthly income of the elderly people was 245.1±82.6 million Turkish Liras (making approximately 150 (±50) U.S. dollars). The prevalence of depression symptoms was found to be 58.3 % (n=175) in the total study population. The prevalence of depression was found to be 45.1% (n=79) in male subjects and 54.9% (n=96) in female subjects . In the prevalence of depression in the elderly population, some parameters a such as gender ($x2= 15.372$, $p<0.001$), education ($x2=32.869$, $p<0.001$) monthly income ($t = 5.179$, $p <0 .000$), marital status ($x2=7.317$, $p<0.01$), the presence of chronic disease, ($x2= .8.242$, $p<0.01$), satisfaction from the family environment ($x2= 13.093$, $p<0.001$) and living arrangements ($x2=14.014$, $p<0.01$) have statistically significant effect on depression prevalence. Nevertheless, different age groups ($x2= 1.745$, $p>0.05$) and social assurance status ($x2=0.161$, $p>0.05$) did not have any significant effect on the prevalence. The prevalence of depression was found to be significantly high in the subjects who were illiterate (57.1%), married (61.1%), had chronic disease

(72.0%), where living together with children (48.6 %) and unsatisfied with the family environment (54.9%). On the other hand, various age groups presence of assurance status did not produce a statistically significant difference in terms of depression prevalence.

Objective: II To assess the level of Depressive symptoms among the elderly people before the Music therapy

The study result of depressive symptoms percentage before music therapy and the overall depression score is 100%. The elderly people had no depression is none. In general 73.3% of the elderly people had Mild to moderate level of depression, 26.7% had severe depression. With mean and standard deviation as16. (72±3.88)

The study consistent within a study which is conducted by **Dr.Renukha.k et al.,(2015)** Totally 40 Elderly were participated in the study. It was observed that Majority of subjects resided for 3-5 years at the old-age home. Majority of the samples had Normal and Mild level of Depression. The study shows the distribution of level of Depression among elderly at Volontariat Home, Oupalam, Puducherry. It depicts that, out of the 40 subjects the pre test scores are 26 (65%) had mild depression, and 14(35%) had moderate depression .The mean pretest values of Depression score are (12.4250) and standard deviation (3.5911).

Objective: III To evaluate the level of depressive symptoms among the elderly people after the Music therapy.

The study result of depressive symptoms percentage after music therapy and the overall depression score is 100%. The elderly people had no depression is 28(46.7%). In general 32(53.3%) of the elderly people had Mild to moderate level of depression, none of them had severe depression.

The study is similar with a study which is conducted by **Dr.Renukha.k et al.,(2015)** After the introduction of music therapy 22 (55%) had normal depression, 13 (32.5%) had mild depression, and 5 (12.5%) had

Moderate depression respectively. Posttest measurement of mean as (7.3375) and standard deviation (2.3172). Depression score which proved that there was significant reduction in the level of Depression among Elderly due to Music therapy. The obtained 't' value 7.5287 was highly statistically significant (0.0001) at $p< 0.001$ level. Depression being one of the causes of a variety of diseases and disorders in the world today, especially in Elderly population, through this study it was proven that Music therapy reduces the level of Depression among Elderly suffering from Depression. Therefore it is suggested that Music therapy can be done in all types of groups in long term basis as well for reducing Depression.

Objective: IV To determine the effectiveness of Music therapy intervention.

In effectiveness of music therapy, the overall pretest score among the elderly people was 16.72 with standard deviation of ± 3.88 and in posttest, the score is 8.30 with standard deviation of ±2.16. So the differences are large and it showed statistically significant difference ($P \leq 0.001$) in paired test.

Music therapy is effective in reducing depressive symptoms among elderly people. Hence the statistical hypotheses have been proved.

The study coincides with a study which is conducted by **Erkkilä et *al.* (2011) Kerala** lay down a clear marker for the value of music therapy as part of the range of interventions available for the treatment of people with depression. During the study period 123 people were screened, of whom 113 (92%) were eligible to participate in the study 31 eligible patients (27%) refused to take part in the study and 1 (1%) was considered unsuitable for music therapy following assessment by a music therapist. The remaining 81 (72% of eligible patients) were randomized 60 (74%) were men, and ages ranged from 18 to 64 years (mean 37). Of the 81 participants, 33 (41%) were randomized to music therapy and 48 (59%) to control treatment.

Objective: V To find the association of post test score with selected demographic variables.

The association between the level of Depressive symptom reduction score with the socio demographic variables. Elders were with age 70-80, educated, pensioners, less duration of stay people are reduced more score than others. Statistical significance was calculated using chi square test.

There is a statistically significant association between the post depressive scores of elderly people with selected demographic variables of elderly people. Hence the statistical hypotheses have been proved.

The study is similar with a study which is conducted by **Norhidhayati M H (2005)** were depicted that 17.7% of the study subject had no formal education,56.3% had primary education and 9% completed secondary education this may be due to the fact that researcher had restricted the study population to the senior citizen staying in the particular old age home where most inmates were educated. The present study had shown the prevalence of mild depression among the elderly was 37.8% and that of severe depression was 21%. The prevalence of depression had a significant association with education, occupation, income, spouse status, smoking and history of chronic illness.

CHAPTER VII

CONCLUSION AND RECOMMENDATION

This chapter deals with the conclusion, Its implication to nursing, limitation and recommendations for the further study. The present study was designed to evaluate the effectiveness of music therapy on depression, among elderly people in a selected geriatric home in Chennai.

Depression also increases the risk of suicide, especially in elderly. The suicide rate in people ages 80 to 84 is more than twice that of the general population. The National Institute of Mental Health considers depression in people age 65 and older to be a major public health problem. Depression in old age is a complex multifactorial phenomenon that is influenced by several biopsychosocial variables. Depressive symptoms are associated with the presence of chronic diseases, with being female, with low education and low income levels, and with poor perceived health assessment. In impoverished areas, older adults may have more physical disability, as they may have less access to health services. Therefore, they may be more likely to report depressive symptoms.

So the investigator conducted a study to assess the effectiveness of music therapy to reduce depressive symptoms among elderly people in selected geriatric home at Chennai. The data was collected for four weeks from 16.07.2015 to 17.08.015. The collected data was analyzed by using the descriptive statistics (percentage, mean, standard deviation) and inferential statistics (student paired‘t’ test and chi square test).

7.1. IMPLICATION OF THE STUDY

The finding of the study has implications for nursing practice, nursing administration, nursing education and nursing research.

7.1.1. Nursing Practice

- Depression is the most common mood disorder older adults. Depression may arise from low self-esteem and may be related to live situations.

- The nurse working in the practice settings can help to identify the depression in elderly which is an under diagnosed problem for many adults.
- Clinical experience suggests that older patients often focus more on the somatic symptoms than on the cognitive aspects.
- Complementary and alternative therapies are harmonious with many values of nursing.
- Music therapy helps to improve the quality of life among older adults and it can be adopter in the routine ward activity.
- Nurses can proactively work for the establishment of effective community support programmes for abused elders.
- Application of music therapy as an alternative therapy to impact health has been repeatedly demonstrated to be clinically appropriate for many medical surgical psychiatric and general populations.
- Music therapy may be easily integrated into bed side nursing as well as to as wide range of possible clinical settings that include waiting room, home care, critical care unit, psychiatric settings etc.,

7.1.2. Nursing Administration

- Nursing administrators should take initiative in organizing mass educational programmes in the hospital and community to emphasis the problems faced by elderly, how to effectively intervene in such matters.
- Nurse administrators should motivate the staff and also the relatives to participate in various programme related to Gerontology and should inculcate right attitude in them towards care of elderly.
- More over the mental health team can collaborate with the nearby old age homes in implementing counseling services and also diagnosing the otherwise and diagnose depression of the elderly and also making referral services to the nearby mental health centers.

7.1.3. Nursing Education

- Geriatric and Geropsychiatric is an emerging field. There is a need for increased professional awareness of the problems like Geriatric depression and its warning science.
- Nurse and nursing students at all levels and in various academic programme should be thought regarding the various problems in geriatric home and how to intervene.
- From beginning of their studies nursing students should be made to inculcate the right attitude towards the old age and they should the made to deal with their issues with great compassion.
- Nurses in all areas need to be aware of the reporting loss in the state were they are practicing and watch for the science of abuse are neglect.
- Today the educations become a depressionful one because of the grades and ranks in the examination.
- In nursing depression can be because of factors such as staying away from home, high expenses of the study, parental expectation and high competitiveness, associated hectic clinical and class schedule a very high demand to achieve high marks in crucial examinations.
- Methods of alternative and complementary therapies can be included in the curriculum for the increasing knowledge of the student in this area since tension and turmoil are increasing the day by day.
- This in turn will help to have a positive attitude towards these techniques.

7.1.4. Nursing Research

- From the nursing research point of view the study throws light on the increased prevalence of depression among elderly people of geriatric home which seek attention in the need for specific mental health care needs of elderly.
- The research to date as shown that studies conducted in the areas of depression among elderly are very few and also various intervention

strategies in relieving the depression are very less and is in need for the exploration.

- The outcome studies of various psycho therapeutic therapies for elderly are also needed.
- Usages of music in clinical practice is relatively unexplored area as for as India is concern.
- Emphasis should be laid on research in the area of non pharmacological measures of managing depression, Promoting sleep improving psychological, Physical and social well being among elderly.
- Many more research studies could be done to assist the efficacy of highly feasible and less expensive therapy in various other conditions and settings.
- The researcher can explore similar therapies which reduce depression, increase relaxation, self-confidence and self-worth of the client.

7.2. Limitations

- The study will be limited to elderly people who are residing in old age home.
- Elderly people who can understand Tamil or English and respond verbally.
- The study will limited to data collection period of four weeks.

7.3. Recommendation for further studies:

- Keeping in view, the finding of the present study can be used as a guide for future research. A similar study can be replicated with on a large sample in different setting.
- A similar study can be conducted to assess the effectiveness of other complimentary therapies on depression.
- A longitudinal study can be undertaken to find out the long term effect of music therapy on depression.

7.4. Conclusion

Education in evidence based care gives the opportunity to nurses to improve their ability to use theoretical knowledge in practice.

Depression is the factors which causes more psychological problems in our life. It occurs when a person has difficulty dealing with life situations, problems and goals. Each person handles depressive symptoms differently; someone can thrive in a situation that creates great distress for another.

This study concluded that nurse's role in managing the depressive symptoms is mandatory. Through music therapy, the elderly people's depressive symptoms had got reduced 32.6%. So this reduction in depressive symptoms level reflects the effectiveness of music therapy. So the nurses should educate the elderly people to understand the causes of depressive symptoms in old age and advantages of music therapy.

This chapter enlightens the importance of this research and reveals that the reduction in the level of depressive symptoms among elderly people is significant.

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APPENDIX -1

Section – A

Socio Demographic Data of the Elderly People

Read the following question and put a tick mark (√)

1. **Age in years**
   a) 60- 70 years ☐
   b) 70 -80 years ☐
   c) 80 above ☐
2. **Religion**
   a) Hindu ☐
   b) Christian ☐
   c) Muslim ☐
   d) Others ☐
3. **Marital status**
   a) Married ☐
   b) Single ☐
   c) Divorced ☐
   d) Widowed ☐
4. **Education**
   a) No formal education ☐
   b) Primary ☐
   c) Higher secondary ☐
   d) Graduate ☐
5. **Occupation**
   a) Government ☐
   b) Private ☐
   c) business ☐
   d) Others ☐
6. **Financial support**
   a) Government retired pension ☐
   b) OAP (Old age pension) ☐

c) Any other ☐

d) None of the above ☐

7. Number of children

a) 1 (or) 2 ☐

b) More than 2 or 3 ☐

c) No children ☐

8. Mode of admission

a) Referred by trust ☐

b) Voluntary admission ☐

c) From the children ☐

d) others ☐

9. Recreational activities

a) Watching TV ☐

b) Listening music ☐

c) Reading books ☐

d) Others ☐

10. Duration of stay

a) Below one year ☐

b) 2-3 years ☐

c) 3-5 years ☐

d) More than 5 years ☐

Section –B

Geriatric Depression Scale –Yesavage (1983)

S.NO	ITEMS	YES	NO
1.	Are you basically satisfied with life?		
2.	Have you dropped many activities and interest?		
3.	Do you feel that your life is empty?		
4.	Do you often get bored?		
5.	Are you hopeful about the future?		
6.	Are you bothered by thoughts you can't get out of your head?		
7.	Are you in good spirits most of the time?		
8.	Are you afraid that something bad is going to happen to you?		
9.	Do you feel happy most of the time?		
10.	Do you often feel helpless?		
11.	Do you often get restless and fidgety?		
12.	Do you prefer to stay at home, rather than going out and doing new things?		
13.	Do you frequently worry about the future?		
14.	Do you feel you have more problems with memory than most?		
15.	Do you think it is wonderful to be alive now?		
16.	Do you often feel downhearted and blue?		
17.	Do you feel pretty worthless the way you are now?		
18.	Do you worry a lot about the past?		
19.	Do you find life very exciting?		
20.	Is it hard for you to get started on new projects?		
21.	Do you feel full of energy?		
22.	Do you feel that your situation is hopeless?		

23.	Do you think that most people are better off than you are?		
24.	Do you frequently get upset over little things?		
25.	Do you frequently feel like crying?		
26.	Do you have trouble concentrating?		
27.	Do you enjoy getting up in the morning?		
28.	Do you prefer to avoid social gatherings?		
29.	Is it easy for you to make decisions?		
30.	Is your mind as clear as it used to be?		

Interpretation

Total score – 30

Scoring	**Interpretation**
0 – 9	No depression,
10 – 19	Mild depression
20 – 30	Moderate and Severe depression

சமூக பொருளாதார விவரங்கள்

1. வயது (வருடத்தில்)
   - அ) 60-70 ☐
   - ஆ) 70 -80 ☐
   - இ) 80- க்கு மேல் ☐
2. மதம்
   - அ) இந்து ☐
   - ஆ) கிறிஸ்தவம் ☐
   - இ) முஸ்லீம் ☐
   - ஈ) மற்றவை ☐
3. திருமண விவரம்
   - அ) திருமணமானவர் ☐
   - ஆ) திருமணமாகவில்லை ☐
   - இ) விவகரத்தானவர் ☐
   - ஈ) விதவை ☐
4. கல்வித்தகுதி
   - அ) முறையான கல்வி பயிலாதவர் ☐
   - ஆ) முதல் நிலைக்கல்வி ☐
   - இ) உயர் நிலைக் கல்வி ☐
   - ஈ) பட்டபடிப்பு ☐
5. வேலை
   - அ) அரசாங்க வேலை ☐
   - ஆ) தனியார் துறை ☐
   - இ) சுய தொழில் புரிபவர் ☐
   - ஈ) மற்றவை ☐
6. பொருளாதார உதவி
   - அ) பென்ஷன் ☐
   - ஆ) முதியோர் உதவித் தொகை ☐
   - இ) மற்றவை (பிள்ளைகளிடம் இருந்து) ☐
   - ஈ) இவற்றில் எதுவும் இல்லை ☐

7. குழந்தைகளின் எண்ணிக்கை

அ) 1 (அல்லது) 2 ☐

ஆ) 2 க்கு மேல் ☐

இ) குழந்தைகளில்லை ☐

8. முதியோர் இல்லத்தில் அனுமதிக்கப் பட்ட முறை

அ) டிரஃஸ்ட் மூலமாக ☐

ஆ) சுய விருப்பதின் பேரில் ☐

இ) பிள்ளைகளால் ☐

ஈ) மற்றவர் மூலம் ☐

9. பொழுது போக்கு

அ) தொலைக்காட்சி பார்ப்பது ☐

ஆ) பாடல்கள் கேட்பது ☐

இ) புத்தகம் படிப்பது ☐

ஈ) மற்றவர்களுடன் கலந்துரையாடல் ☐

10. இல்லதில் தங்கி இருக்கும் காலம் (வருடத்தில்)

அ) ஒரு வருடத்துக்குள் ☐

ஆ) 2-3 வருடங்கள் ☐

இ) 3-5 வருடங்க்ள் ☐

ஈ) 5 வருடங்களுக்கும் மேலாக ☐

SECTION – B

வயதானவர்களுக்கான மன அழுத்த அளவுகோல்-1983

வ.எண்	வினாக்கள்	ஆம்	இல்லை
1	உங்கள் வாழ்க்கை மன நிறைவுடன் இருக்கிறதா?		
2	நீங்கள் பொழுதுபோக்கு செயல்களை விட்டுவிட்டீர்களா?		
3	உங்கள் வாழ்க்கை வெறுமையாக இருக்கிறது என நினைக்கிறீர்களா?		
4	நீங்கள் அடிக்கடி வெறுமை அடைகிறீர்களா?		
5	நீங்கள் எதிர்கால வாழ்க்கையைப் பற்றி நம்பிக்கை அடைகிறீர்களா?		
6	உங்களால் மறக்கமுடியாத நினைவுகள் உங்களை தொந்தரவு செய்கிறதா?		
7	நீங்கள் எப்போதும் கடவுள் நம்பிக்கை உள்ளவரா?		
8	நீங்கள் எதிர்காலத்தில் அசம்பாவிதம் நடக்கும் என்று நம்பி பயப்படுகிறீர்களா?		
9	நீங்கள் எப்போதும் சந்தோஷமாக இருக்கிறீர்களா?		
10	நீங்கள் எப்போதும் உதவிக்கு யாரும் இல்லை என நினைக்கிறீர்களா?		
11	நீங்கள் எப்போதும் அமைதியற்று பதட்டத்துடன் இருக்கிறீர்களா?		
12	நீங்கள் வெளியே சென்று புதிய செயல்களை செய்வதை விட, வீட்டில் இருப்பதே மேல் என விரும்புகிறீர்களா?		
13	நீங்கள் எதிர்காலத்தை கொண்டு வருத்தபடுகிறீர்களா?		
14	நீங்கள் ஞாபகசக்தியால் ஏதாவது அவதிக்கு உள்ளாகிறீர்களா?		
15	நீங்கள் இப்போது உயிருடன் இருப்பதை வியப்பாக நினைக்கிறீர்களா?		
16	நீங்கள் மன அழுத்ததுடன் இருக்கிறேன் என நினைக்கிறீர்களா?		

வ.எண்	வினாக்கள்	ஆம்	இல்லை
17	நீங்கள் யாருக்கும் பிரயோஜனப்படாதவர் என நினைக்கிறீர்களா?		
18	நீங்கள் கடந்த காலத்தை நினைத்து கவலை கொள்கிறீர்களா?		
19	இந்த வாழ்க்கை உங்களுக்கு மிகவும் உற்சாகமாக இருக்கிறதா?		
20	புதிய தொழில் தொடங்குவதற்கு கடினமாக உள்ளதா?		
21	நீங்கள் உத்வேகத்துடன் இருப்பதாக நினைக்கிறீர்களா?		
22	இந்நிலையில் நம்பிக்கையற்று இருப்பதாக காணபடுகிறீர்களா?		
23	உங்களை விட மற்றவர்களே மேல் என நீங்கள் நினைக்கிறீர்களா?		
24	சிறு காரியங்களுக்காக அடிக்கடி மனவருத்தபடுகிறீர்களா?		
25	உங்களுக்கு அடிக்கடி அழவேண்டும் என்று தோன்றுகிறதா?		
26	நீங்கள் கவனிப்புத்திறனில் தொந்தரவு இருப்பதாக நினைகிறீர்களா?		
27	தூக்கத்திலிருந்து காலையில் எழுந்தரிப்பது உங்களுக்கு சந்தோஷமாக இருக்கிறதா?		
28	நீங்கள் சமுதாய உறவுகளை சந்திக்க வெறுக்கிறீர்களா?		
29	உங்களுக்கு முடிவுகளை எடுப்பது எளிமையாக உள்ளதா?		
30	நீங்கள் உங்கள் எண்ணங்க்களை உபயொகபடுத்தியபின் எண்ணங்கள் தெளிவாக இருக்கிறதா?		

Music intervention package

"Music is a discipline and a mistress of good manners it makes the people milder and gentler, more moral and more reasonable"

-Martin luther king

Introduction about music therapy:

Music plays important parts in our life, from the day come into the world and in fact even before that. Music has always enchanted the humanity. When one is tired and don, music can be uplifting. It can calm the strained nerves, soothe the depressed, comfort the lonely and delight the young. It is evident from the scriptures that music has healing powers.

Ragas are the basis of classical Indian music. It I based on the combination of notes selected out of , at intervals of octave. Each raga has a basic emotion as an undercurrent of its expression. Raga is the basic melody and tala is the basis of the rhythm. Raga involves the production of emotional effects in the performer as Well as the listener which are specific responses.

Each raga is based on the definite mood or sentiment that nature arouses in human beings. Music had the power to cure, to make you feel happy, sad, disgusted and so on. It is rightly said that performing or listening to a raga at proper allotted time can affect the health of human beings. Composers can use various raga to evoke emotions other that hat is assigned for the rage.

History:

The first music therapy degree program in the world, founded at Michigan state university in 1944. Music therapy during the past thirty years concepts in the mental health profession have undergone continuous and dramatic changes. A relatively new type of therapy is music therapy, which incorporates music into the healing process. The idea of music as a healing influence which would affect health and behaviour is as least as old as the writings of Aristotle and Plato.

Definition:

Music therapy may be defined as the behavioural science concerned with the systematic application of muscle to produce relaxation and desired changes in emotions, behaviours and physiology.

Types:

Music therapy includes listening to music and creating music.

According to D. Aldridge,

There are two principal ways of doing music therapy,

1) **Active Music Therapy-** Which requires that the patient, or a group of patients, play musical instruments, or sing with the therapist; and passive music therapy where by the patient, or a group of patients, listen to the therapist who plays live or recorded music to them. In active therapy, the music is often improvised to suit the individual patient.
2) **Passive Music Therapy -**The music is often chosen to suit particular patients.

Benefits:

- Music therapy is used to elevate patient's mood and counteract depression.
- Music is used to promote movement for physical rehabilitation.
- Slow music is used to counteract apprehension or far
- Lesson muscle tension for the purpose of relaxation.
- Music therapy has been reviewed in the medical and nursing press.
- The principle emphasis is on the soothing ability of music and necessity of music as an antidote to an overly technological medical approach.

Purposes of Music Therapy Are:-

- It enhances the quality of neurotransmitters.

- Listening to music actually cause brain to perform better 8 partial reasoning.
- Music is a part of human nature. Human brain processes music.
- Effects of music on child's behaviour and thought are powerful
- Music enhances cognitive process.
- Music promotes physiological and behavioural relaxation in children.
- Music education facilitates language development and regarding readiness.
- Music alerts children's brain waves.

Music therapy allows persons with mental health needs to explore personal feelings, make positive changes in mood and emotional states, have a sense of control over life through successful experiences, practice problem solving, and resolve conflicts leading to stronger family and peer relationships.

Steps:

Step1. Assessments & Evaluations

During the first two or three sessions with a new client or group, the music therapist uses instruments and a basic session design (greeting & closing songs) to collect data. He/she will look at seven skill areas - physical, social, behavioral, cognitive, communicative, creative and musical. After the data has been collected, individual or group goals and objectives are chosen.

Step 2.Sessions

After the goals and objectives are defined, the music therapist meets with the client on a fixed weekly schedule in an agreed upon location. The therapy sessions are individually designed to reach the goals stated and the therapist uses music, instruments, song writing, improvisation and movement to support the client in meeting those goals. Clients become active and central participants in the music making at whatever level they are currently able. After every session, the music therapist takes notes to track the progress of the therapy.

For students who have Music Therapy goals written into their IEPs, formal quarterly progress reports and recommendations are submitted to the treatment team.

Step 3.Re-Assessment

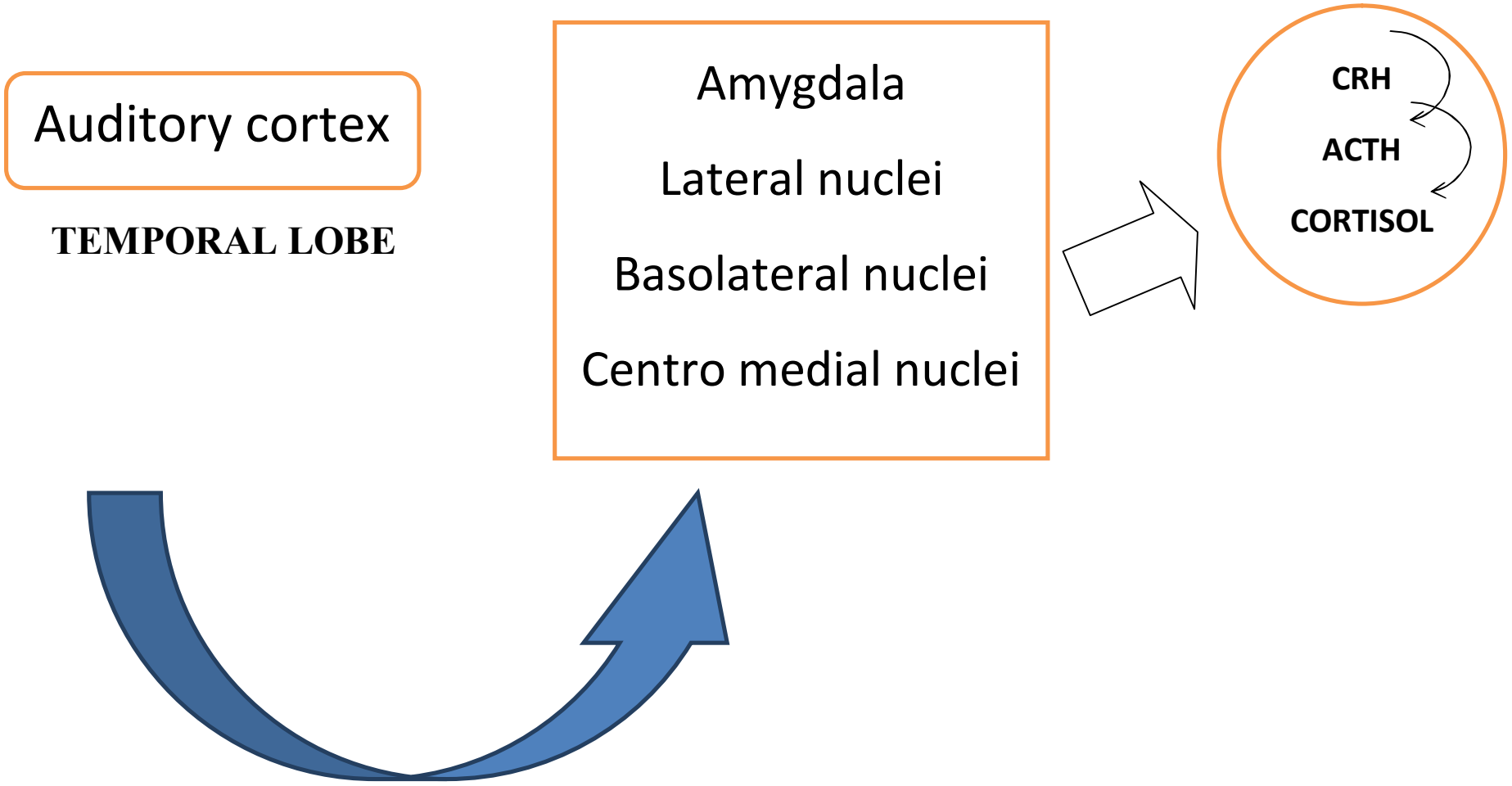
Through the process of tracking a person's or groups progress, the music therapist might re-adjust the goals and objectives either because the first goals have been met or because other more important needs arise. In some cases, where music therapy does not seem to be reaching the desired objectives, a music therapist will recommend ending the treatment. However, music therapy can be used as an on-going therapy for people who respond positively and have on-going needs.

Step 4.Closure

The relationship between the music therapist and his/her clients is a close one, therefore in the best interest of the client, proper closure is very important no matter what the reason for ending the therapy is.

Music Therapy is phased out over a period of at least two closure sessions. During this time, the client is able to safely consider and express their emotional connection to the therapy and to reflect on all the progress they have achieved. This is imperative to the overall therapeutic process to decrease feelings of abandonment or to decrease anxiety over work that has been left undone.

Music Therapy Pathway



Goals:

The goals of Music Therapy are to use the experience of music to aid the old age in attaining, maintaining, or regaining optimum levels of functioning or adaptation in all areas of health and development. This is achieved through a range of face-to-face services, resourcing, and team participation.

1. Increase compliance with medical and therapeutic/developmental goals by:

- Decreasing anxiety prior to and during procedures by providing age appropriate musical activities including live singing of nursery rhymes, or access to guitar hero and singstar games.
- Decreasing agitation in Post Traumatic Amnesia by using the structured and predictable nature of familiar music to provide a contained experience.
- Encouraging increased participation in functional rehabilitation by providing an enjoyable context within which to complete the often repetitive nature of the tasks required.
- Effecting mood.

2. Build and maintain skills to sustain healthy development and relationships by:

- Providing experiences of healthy peer interactions such as songwriting and group work for young people living with anorexia.
- Encouraging parents to interact with their young infant using song.
- Individual songwriting with adolescents experiencing cancer, providing a means of self-expression that may assist in processing feelings about their journey.
- Use of familiar music and activities to provide a conduit to the world outside for patients in isolation.

3. Ease adjustment to illness/ hospitalization by

- Providing musical experiences that are familiar.
- Assisting in adjustment to a more positive hospital experience for patients and families.

- Working with patients experiencing chronic pain to develop skills for managing their ongoing pain.

4. Promote Change of State contributing to a more positive recovery trajectory

- Decreasing anxiety, fear, anger, agitation, distress and sadness.
- Increasing understanding, acceptance and engagement with unfamiliar experiences within the hospital setting.
- Coma Arousal.

Indications:

- Depression
- Mood-related concerns
- Anxiety
- Schizophrenia
- Substance dependency
- Autism
- Personality issues
- Insomnia
- Dementia
- Schizophrenia
- Schizoaffective Disorder
- Drug induced psychosis
- Mood Disorders
- Major Depressive Disorder
- Bipolar Disorder
- Adjustment Disorder
- Bereavement

Music therapy can be used in a variety of ways:

When a person experiences difficulty communicating after a stroke, singing words or short phrases set to a simple melody can often enhance speech production and fluency.

A person with impaired motor skills might improve fine motor skills by playing simple melodies on a piano or tapping out a rhythm on drum pads. Listening to a rhythmic stimulus, such as a metronome, can also help a person initiate, coordinate, and time their movements.

A therapist might play a piece of music for old age with depressive symptoms who have limited social skills and ask them to imagine the emotional state of the person who created the music or the person who is playing it. Group drumming circles have been used to induce relaxation, provide an outlet for feelings, and foster social connectedness among members of a group. Group members might sit in a circle with a hand drum while the therapist leads them in drumming activities that may involve group members drumming one at a time or all at once. Those who are part of the circle may be asked to express how they feel by playing a rhythm on their drum or the group might be asked to improvise music as a means of increasing group cohesiveness.

Training for Music Therapists

Those wishing to become a music therapist must have at least a bachelor's degree in music therapy from an institution approved by the American Music Therapy Association (AMTA). Music therapy programs involve coursework as well as an internship in an educational and/or health care facility. After successfully completing one of the AMTA-approved programs, individuals must take the national examination offered by the Certification Board for Music Therapists (CBMT). If they are successful in the examination, they receive the credential Music Therapist-Board Certified (MT-BC), which is required for professional practice. Board certification is renewed every five years, and in order to maintain this credential, music therapists must retake the CBMT examination or complete 100 recertification credits within each five-year period.

Limitations of Music Therapy

- ✓ Music therapy generally produces positive results.
- ✓ While music may help to alleviate some of the symptoms of these conditions, other forms of treatment such as medication, physical therapy, or psychotherapy may also be necessary.
- ✓ The benefit of a particular type of music will often depend on an individual's preferences and the condition experienced by that individual, and some music forms may actually cause agitation.
- ✓ To achieve success with music therapy, a therapist will likely need to ensure the musical preferences of the individual in treatment are taken into consideration.

Music and the elderly:

The geriatric population can be particularly prone to anxiety and depression, pa rticularly in nursing home residents. Chronic diseasescausing pain are also not uncommon in this setting. Music is an excellent outlet to provide enjoyment, re laxation, relief from pain, and anopportunity to socialize and reminisce about m usic that has had special importance to the individual. It can have a striking effe ct onpatients with Alzheimer's disease, even sometimes allowing them to focus and become responsive for a time. Music has also beenobserved to decrease the agitation that is so common with this disease. One study shows that elderly pe ople who play a musicalinstrument are more physically and emotionally fit as t hey age than their nonmusical peers are. In these groups, participation and social interaction are promoted through music. Reality orientation is improved. Patients are helped to develop coping skills, reduce stress, and express their feelings.

Conclusions:

- Music has no doubt plays a critical role in the lives of human beings.

- Incorporating music therapy into regular therapy programs for psychiatric disorders can help speed recovery and also help make therapy a more positive experience.
- Music therapy is valuable but relatively unexplored asset in the field of psychiatry and psychotherapy.

Music therapy, when added to standard care, has strong and significant effects on global state, general symptoms, negative symptoms, depression, anxiety, functioning and musical engagement. Significant dose-effect relationships were identified for general, negative and depressive symptoms, as well as functioning. (Gold et al, 2009)

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ஆராய்ச்சி ஒப்புதல்தாள்

ஆராய்ச்சி தலைப்பு : வயதனவர்களுக்கிடையே இசைப்பயிற்சி மூலம் மன அழுத்தத்தைகுறைக்க முதியோர் இல்லத்தில் ஆய்வு.

ஆய்வாளர் பெயர் : **ல. துளசி**

பங்கேற்பாளர் பெயர் :

தேதி :

வயது/பாலினம் :

- சு ஆய்வாளர் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டாயமுமின்றி முழுமனதுடனும் சுயநினைவுடனும் சம்மதிக்கிறேன்.
- சு ஆய்வாளர் மேற்கொள்ள போகும் பரிசோதனைகளை மிக தெளிவாக விளக்கிக்கூறினார்.
- சு எனக்கு விருப்பமில்லாத பட்சத்தில் ஆராய்ச்சியிலிருந்து எந்நேரமும் விலகலாம் என்பதையும் ஆய்வாளர் மூலம் அறிந்து கொண்டேன்.
- சு இந்த ஆராய்ச்சி ஒப்புதல் கடிதத்தில் உள்ள விவரங்களை நன்கு புரிந்துகொண்டேன். எனது உரிமைகள் மற்றும் கடமைகள் ஆராய்ச்சியாளர் மூலம் விளக்கபட்டது.
- சு நான் ஆராய்ச்சியாளருடன் ஒத்துழைக்க சம்மதிக்கிறேன்.எனக்கு ஏதேனும் உடல்நலகுறைவு ஏற்பட்டால் ஆராய்ச்சியாளரிடம் தெரிவிப்பேன்.
- சு நான் வேறு எந்த ஆராய்ச்சிலும் தற்சமயம் இடம்பெறவில்லை என்பதை தெரிவித்துகொள்கிறேன்.
- சு இந்த ஆராய்ச்சியின் தகவல்களை வெளியிட சம்மதிக்கிறேன்.அப்படி வெளியிடும்போது என் அடையாளம் வெளிவராது என்பதை அறிவேன்.
- சு எனக்கு இந்த ஒப்புதல் கடிதத்தின் நகல் கொடுக்கபட்டது.

ஆய்வாளர் கையொப்பம் பங்கேற்பாளர் கையொப்பம்

தேதி தேதி

ஆராய்ச்சி தகவல் தாள்

ஆராய்ச்சி தலைப்பு :வயதனவர்களுக்கிடையே இசைப்பயிற்சி மூலம் மன அழுத்தத்தை குறைக்க முதியோர் இல்லத்தில் ஆய்வு.

ஆய்வாளர் பெயர் : **ல. துளசி**

பங்கேற்பாளர் பெயர் :

தேதி :

வயது/பால்

ஆய்வாளர் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டாயமுமின்றி முழுமனதுடனும் சம்மதிக்கலாம். இதில் பங்கேற்பதன் நோக்கம். இந்த ஆராய்ச்சியில் தகவல்களை தெரிந்து கொள்வதற்காகவும். அதனை பயன்படுத்துவதற்காக மட்டும் தான்.

இந்த ஆராய்ச்சியின் நோக்கம், வயதனவர்களுக்கிடையே மன அழுத்தத்தைகுறைக்க இசைப்பயிற்சி பயன்படுத்தும் முறைகளை பற்றி கற்றுதருவது,

ஆராய்ச்சி மேற்க்கொள்ளும் முறை

இந்த ஆராய்ச்சியில் வயதனவர்களுக்கிடையேஆய்வாளர் தயார் செய்த கேள்வி மூலம், இசைப்பயிற்சி பயன்படுத்தும் முறைகளை கற்றுதருவதற்கு முன்பு மற்றும் பின்பு அவருடைய அறிவுத்திறன் மேம்படுவதை அறியலாம்.

இதனால் ஆய்வாளருக்கான பயன்

இந்த ஆய்விற்க்குபின் வயதனவர்கள் இசை பயிற்சிமூலம் மன அழுத்தத்தை குறைக்கும் முறைகளை கற்றுதந்ததன் தாக்கத்தினை அறியலாம்.

இதனால் பங்கேற்பாளருக்கான பயன்

இந்த ஆய்வு மன அழுத்தத்தை ஏற்படும் பின்விளைவுகளை தவிர்க்க, அவரின் அறிவு திறனை மேம்படுத்துகிறது.

ஆராய்ச்சியில் பங்கேற்கவில்லை என்றாலும், உங்களின் சராசரி வாழ்கைமுறை, மருத்துவரின் ஆலோசனை மற்றும் சிகிச்சை முறையில் எந்த வித மாற்றமும் ஏற்படாது என்பதை தெரிவிக்கிறேன்.

இந்த ஆராய்ச்சியில் பங்கேற்க விருப்பம் இல்லை என்றால் உங்களின் முழுமனதுடன் நீங்கள் இந்த ஆராய்ச்சியில் இருந்து விலகி கொள்ளலாம் என்பதை தெரிவிக்கிறேன்.

இந்த ஆராய்ச்சியில் உங்களின் மருத்துவதகவல்களை பாதுகாப்பாக வைத்துகொள்கிறேன் என்பதை தெரிவிக்கிறேன்.

இந்த ஆராய்ச்சியின் தகவல்களை வெளியிடும் போது, உங்களை பற்றிய அடையாளங்கள் வெளிவராது என்பதை உறுதி கூறுகிறேன்.

ஆய்வாளர் கையொப்பம் பங்கேற்பாளர் கையொப்பம்

தேதி தேதி

INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI-3

EC Reg No.ECR/270/Inst./TN/2013
Telephone No. 044 25305301
Fax : 044 25363970

CERTIFICATE OF APPROVAL

To
Mrs. THULASI.L
M.Sc., (Nursing)
College of Nursing
Madras Medical College,
Chennai – 600 003.

Dear Mrs. THULASI.L,

The Institutional Ethics Committee has considered your request and approved your study titled **A STUDY TO ASSESS THE EFFECTIVENESS OF MUSIC THERAPY ON DEPRESSIVE SYMPTOMS AMONG ELDERLY PEOPLE IN SELECTED GERIATRIC HOME, CHENNAI. No.33102014.**

The following members of Ethics Committee were present in the meeting held on 21.10.2014 conducted at Madras Medical College, Chennai-3.

1. Dr.C.Rajendran, M.D.,	: Chairperson
2. Dr.R.Vimala, M.D., Dean, MMC, Ch-3	: Deputy Chairperson
3. Prof.B.Kalaiselvi, M.D., Vice-Principal, MMC, Ch-3	: Member Secretary
4. Prof.R.Nandhini, M.D., Inst.of Pharmacology, MMC	: Member
5. Prof.K.Ramadevi, Director i/c, Inst.of Biochemistry, MMC	: Member
6. Prof.Saraswathy, M.D., Director, Pathology, MMC, Ch-3	: Member
7. Prof.S.G.Sivachidambaram, M.D., Director i/c, Inst.of Internal Medicine, MMC	: Member
8. Dr.Raghumani, M.S., Professor of Surgery, MMC	: Member
9. Thiru S.Rameshkumar, Administrative Officer	: Lay Person
10. Thiru S.Govindasamy, B.A., B.L.,	: Lawyer
11. Tmt.Arnold Saulina, M.A., MSW.,	: Social Scientist

We approve the proposal to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study and SAE occurring in the course of the study, any changes in the protocol and patients information/informed consent and asks to be provided a copy of the final report.

Member Secretary, Ethics Committee

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tool constructed by Ms.L.Thulasi M.Sc. Nursing II year, College of Nursing, Madras Medical College which is to be used in her study titled **"A study to assess the effectiveness of Music therapy on depressive symptoms among elderly people in selected geriatric home in Chennai"** has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

SIGNATURE WITH SEAL

SENIOR CIVIL SURGEON
INSTITUTE OF MENTAL HEALTH
KILPAUK, CHENNAI 10

NAME : DR. V. Venkatesh Mathan Kumar

DESIGNATION: Associate Professor

COLLEGE : Madras Medical college

PLACE: Chennai

DATE: 21.06.2015

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tool constructed by Ms.L.Thulasi M.Sc. Nursing II year, College of Nursing, Madras Medical College which is to be used in her study titled **"A study to assess the effectiveness of Music therapy on depressive symptoms among elderly people in selected geriatric home in Chennai"** has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

SIGNATURE WITH SEAL

NAME : K.VIJAYALAKSHMI

DESIGNATION: PROFESSOR.

COLLEGE : APOLLO COLLEGE OF NURSING, CHENNAI

College of Nursing Apollo College of Nursing Chennai - 600 095

PLACE: Chennai.

DATE: 31.07.2015

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tool constructed by Ms.L.Thulasi M.Sc. Nursing II year, College of Nursing, Madras Medical College which is to be used in her study titled **"A study to assess the effectiveness of Music therapy on depressive symptoms among elderly people in selected geriatric home in Chennai"** has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

SIGNATURE WITH SEAL

NAME :Mrs. CATHERINE BABY SUHASINI

DESIGNATION: LECTURER

COLLEGE :MADHA COLLEGE OF NURSING

MADHA COLLEGE OF NURSING
15 JUL 2015
CHENNAI - 600 069

PLACE: CHENNAI.

DATE: 15-07-15

CERTIFICATE FOR CONTENT VALIDITY

This is to certify that the tool constructed by Ms.L.Thulasi M.Sc. Nursing II year, College of Nursing, Madras Medical College which is to be used in her study titled **"A study to assess the effectiveness of Music therapy on depressive symptoms among elderly people in selected geriatric home in Chennai"** has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

25/1/16

SIGNATURE WITH SEAL

B. SUDHAKARAN M.Phil.,(Cl.Psy), PGDGC,PGDHRM,MIACP.,
RCI No: A07047
Asst. Professor of Clinical Psychology
Institute of Mental Health
Kilpauk Chennai-600 010.

NAME : B. SUDHAKARAN

DESIGNATION: Asst. Prof. of Psychology

COLLEGE : INSTITUTE OF MENTAL HEALTH

PLACE: CHENNAI

DATE: 25/1/16

Kalaiselvi Karunalaya

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Web : www.kkssindia.org

Kk/mmc/2015

January 20, 16

THE PRINCIPAL

COLLEGE OF NURSING

MADRAS MEDICAL COLLEGE

CHENNAI

Madam,

SUB : LETTER OF APPRECIATION FOR THE STUDY CONDUCTED BY MRS. L. THULASI

Greetings from KKSS !

This is to inform that Mrs. L. Thulasi M.Sc Nursing II year student of your college conducted A STUDY TO ASSESS TO EFFECTIVENESS OF MUSIC THERAPY ON DEPRESSING SMPTOMS AMONG ELDERLY PEOPLE IN SELECTED GERIATRICT HOME.

The study was found beneficial for our elders as well. We wish her all success.

Thanking you,

Yours truly,

25/1/16

K. RAJINI DEVI

JOINT SECRETARY

KALAISELVI KARUNALAYA SOCIAL WELFARE
PP 1, 3rd BLOCK,
MOGAPPAIR WEST,
CHENNAI - 600 037.

RADICAL WISDOM SCHOOL OF CULTURE

NO:19/4 RANGANATHAN GARDEN, 15TH MAIN ROAD,ANNA NAGAR,CHENNAI-40

PH: 9789532999, 9790569888

CERTIFICATE OF MERIT

This is to certify that

Mrs L. THULASI ..... *has awarded for their outstanding performance in*

MUSIC THERAPY under our supervision on August 2015.

Chairman

Music Teacher

CERTIFICATE FOR ENGLISH EDITING

This is to certify that the dissertation topic on **"A study to assess the effectiveness of music therapy on depressive symptoms among elderly people in selected geriatric home in Chennai"** done by Ms. L. Thulasi, II year M.Sc Nursing student, College of Nursing, Madras Medical College, Chennai -3 is edited for English language appropriateness.

Name: M.DHANALAKSHMI

Designation: Asst. Professor.

Date: 08/01/2016

Place: Chennai.

Signature with seal

M. DHANALAKSHMI, M.A., M.Phil
Asst. Professor
Dept. of English
Madras Medical College
Chennai-600 003